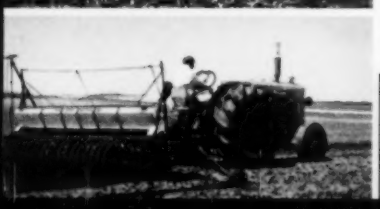
Successful Farming

February 1950 · 20 cents

Early arrivals at the Erwin Kjelshus farm

What makes MINNEAPOLIS-MOLINE MODERN MACHINERY Modern Machines and Tractors *Weather-wise?*



ECONOMICAL and DEPENDABLE Operation Under a Wide Variety of Field and Weather Conditions!

When field working time is shortened because of bad weather, MM MODERN MACHINES and power can be depended upon to do more in less time when conditions are right. Farmers keep costs down and provide the food and fibre upon which our world depends by turning to modern MM machinery. Many a crop has been saved by modern machinery.

MM HI-KLEARANCE PLOWS do good work at higher speeds with good trash coverage, often even when long straw is wet. To prevent clogging there is 23½-inch clearance between sharepoint and beam . . . 26½-inches between sharepoints on 16-inch bottoms . . . 7 to 10-inch lift.

MM TK "TUMBLEBUG" PLOWS, the original two-way plow with automatic leveling, turns all furrows one way. Ideal for irrigated fields, hillsides and terracing, this plow is easy handling, pulls light . . . turns as part of tractor.

MM DISC HARROWS are built for heavy-duty work, yet they're light in weight and easy to handle with good clearance to prevent clogging. A size and type for every need—regular MM harrows penetrate evenly on turns, too.

MM WHEATLAND DISC PLOWS the original "one-way" plows for longer life, better mixing of the stubble and soil with smooth penetration. They're ideal for conservation work because the stubble left protruding through the surface of the ground prevents both water and wind erosion . . . stubble holds any snow that falls for moisture.

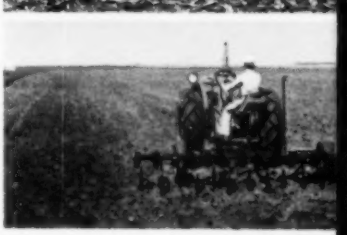
MM UNI-TILLERS may be used for tilling, seeding or cultivating the soil. Can be equipped with middlebreakers, listing plows, regular plows, planters, seeding and damming attachments. Just right for work in vineyards, orchards, contour farming and all soil conservation practices.

MM MONITOR DRILLS put in crops efficiently at uniform depths with accurate distribution of the seed from corn to flax without use of attachments. Fluted or double-run feeds. Single or double disc openers built to cut through trash better and to plant the seed in moist firm soil for faster germination.

MM TF CULTIVATORS have their ground working tools mounted on two rigid bars to assure deep and even penetration. This feature keeps teeth firmly in line.

MM VISIONLINED TRACTORS are engineered and built to provide dependable, economical power on all farm jobs for more years. Quality MM VISIONLINED TRACTORS, like all MM Modern Machines, *are ready to do the job right, on time, every time.*

Ask your MM Dealer for complete facts on these and other MM MODERN MACHINES, VISIONLINED TRACTORS and POWER UNITS. Also ask him when he will show the new MM movies, "Weather Whys" and "An American Journey."



MINNEAPOLIS - MOLINE
MINNEAPOLIS 1, MINNESOTA

Unmatched in Traction

—that's why most farmers want it!

Only Goodyear Super-Sure-Grips give you:

Maximum Traction from straight lug bars *— Lugs extend straight across tire's crown — don't curve toward direction of travel. So you get full-lug pull, longer wear, no wobble.*

Better Grip from lugs positioned for pull *— Equally sized and spaced lugs are set closer together at shoulder for wedge-like action and soil-squeezing grip.*

Deeper Bite from Goodyear OPEN CENTER design *— Goodyear lugs give clean, full-depth penetration, with no hooks, knobs or elbows to blunt their bite.*

It's a fact that no other tractor tire can compare with the famous Goodyear o-p-e-n c-e-n-t-e-r Super-Sure-Grip in traction and pulling power under year-round working conditions.

Proof of that comes straight from the farm. In a recent nation-wide survey, America's farmers voted Goodyear *first choice* by a big margin!

The reasons for Goodyear's superior pulling power are the Three exclusive features listed in the panel above. Only Super-Sure-Grips have this combination of soil-biting o-p-e-n c-e-n-t-e-r design and straight-edged equal-size lugs, properly positioned for wedge-like grip, that gives *"the greatest pull on earth."*

That's why there is no substitute for Goodyear Super-Sure-Grips — no "just as good" tire. Goodyear engineers have tested hundreds of tires with all basic tread variations without finding one that equals it in tractive power, smooth riding and long working life.

So don't be fooled by tires that seem to resemble the farm-proved Goodyear o-p-e-n c-e-n-t-e-r Super-Sure-Grip. The Super-Sure-Grip is the tire most farmers want because it goes where other tires won't — yet doesn't cost you a penny more.

We think you'll like "THE GREATEST STORY EVER TOLD"—Every Sunday—ABC Network

GOODYEAR

Super-Sure-Grip Tractor Tires

Super-Sure-Grip—T. M. The Goodyear Tire & Rubber Company

World's Champion Squash Raiser Wins Title 14th Time

55 Pound Green Hubbard Wins For Minnesota Farmer

Clarence Richter is new World's Champion Squash Raiser. Another of many farm and sports champions who enjoy Wheaties! You getting YOUR Wheaties, too?

ROSEVILLE, MINN.—As more than 1,000 people jammed the judging hall, Clarence Richter won the 1949 Squash Raising Championship. Nothing new for Clarence! He and his father have won title 14 times in past 19 years.

* * *

This year Richters raised 25 tons of Hubbards. Lots of squash on the Richter dinner table! And lots of Wheaties on their breakfast table. Clarence eats those delicious flakes 3 times a week. Likes 'em most with bananas.

"Grandpa says he owes it all to Wheaties."

Mrs. Richter is a fine cook. One of her favorite bakings: cookies made with coconut and Wheaties. In cookies, or in cereal bowl, Wheaties are America's favorite whole wheat flakes. Second-helping good any time of day!

Wheaties are nourishing, too! A famous training dish, they give you B vitamins, minerals, protein, food energy. Fine cereal for active people: Wheaties, "Breakfast of Champions"!

Save with Wheaties. *(1) Silverware coupons in Wheaties and other General Mills products. (2) 50% more than regular size in Extra-Big-Pak of Wheaties.*

"Wheaties" and "Breakfast of Champions" are registered trade marks of **General Mills.**

Successful
Farming
The Dairy Farmer

THE MAGAZINE OF FARM BUSINESS AND FARM HOMES

February 1950 — Vol. 48, No. 2

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"As time goes on"...

THE BIGGER your plans are for your family, the more likely you are to talk about the things you hope to do "as time goes on . . ."

A new barn . . . a bigger farm . . . a better home . . . college for the children . . . ease and security for yourself and your wife as you grow older—there are probably dozens of things you hope to do for your family as the years go by.

But whenever you start planning for the long-range future, it's wise to remember this: It is always possible that you may die before your time and leave some of your work undone.

That's why it's so important to include life insurance in your future plans . . . so that if you *should* die, your ambitions for your family may still be fulfilled.

The New York Life agent serving your county will be glad to help you work out the kind of long-range life insurance program you want to have . . . a program that will not only bring security to your family, but peace of mind to you as time goes on . . .

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Our SECOND CENTURY

New York Life, a mutual company, pays dividends to policyholders . . . It is one of the strongest legal reserve companies in the world.

Farm Outlook

Latest information on conditions, production, markets, and income prospects

Cash income down, costs are up

Best guess on national farm income in 1950 is $25 billion, compared to an estimated $27.7 billion in 1949 and $30.8 billion in 1948. This estimate suggests you had better figure on a cut of around 10 percent in cash receipts next year.

At the same time, you can expect costs to stay high. There's little prospect for declines in prices you pay for production goods as long as wages and prices chase one another up the inflation spiral. Bell for fifth round will be ringing soon!

Cost per pound or bushel also up

While government controls will reduce acreage of many crops this year, farm overhead goes on just the same. Try to avoid higher costs per bushel or hundredweight by holding or boosting your volume of production through use of fertilizer, lime, careful seedbed preparation, cultivation, and use of good seed. Care of livestock—feeding and breeding—economical use of equipment and hired farm labor all will be important factors in net profits at end of 1950. Better management will pay big dividends. (See "You Can Make Money in 1950," January *Successful Farming*.)

Foresighted farmers

As the government puts acreage restrictions into effect on corn, wheat, cotton, and other crops, more acreage is certain to be kept in hay and pasture. Cattle and sheep are the best converters of this roughage into salable meat. Farmers who look ahead are getting the necessary know-how and equipment for livestock production.

Number of cattle on farms is 7 or 8 million head below normal. Prices are exceptionally high compared to other commodities. But farmers and ranchers are holding back calves and heifers. This foretells a marked increase in beef production during the next four to six years. As beef output increases, expect prices to decline.

Cattle feeding situation

Farmers stocked up heavily on feeder cattle last fall. In last half of 1949, nearly one-fourth more feeder cattle were shipped into the Cornbelt than a year earlier. Average weights are lighter, with a bigger proportion of calves to steers than fall of '48. Bulk of these feeders can be expected on the market in late winter and early spring.

Increasing supplies will cause prices for top-grade (choice) steers to work lower during next few months—a normal seasonal development. Prices for good, medium, and common steers usually hold steady or work upward from February to March. After that, prices for good grades work lower, along with choice cattle. Medium and common grades often continue upward until May or June.

A race to market hogs

More often than not, hog prices work upward from February to March. However, if price supports are reduced or terminated after March 31, look for a reaction on the hog market. If farmers send an unusually large number of hogs to market during March, look for prices to slip below price floor.

There will be another grand race to market spring pigs this year. Start now if you expect to win—good feed and care for sows now will help produce strong, fast-growing pigs. Save as many pigs as you can and get them up to 210 pounds as soon as possible. Lighter pigs sold early will be discounted severely. Expect markets to weaken increasingly after August 15.

Looking farther ahead, government-guaranteed high prices for corn will tend to keep cash grain farmers out of the hog business.

Hold normal poultry numbers

Prospects are for a big production of chicks again this year. Last year, hatcheries turned out more than 1.5 billion chicks, 23 percent more than in 1948. This year's output may be even greater, as the commercial broiler industry goes to town on price supports for the first time. Broiler production may top 500 million birds this year, compared to last year's record of 450 million. Ten years ago, production was under 100 million.

Factors in the poultry business on the favorable side are: (1) Feed will be abundant; (2) prices in 1950 will be below '49 but will be supported; (3) feeding ratios will be less favorable in 1950 than in '49 but will return some profits from poultry; and (4) some marginal farmers will get out of poultry in '50. On the unfavorable side: (1) Egg production is highly expanded and government holds substantial stocks; (2) profits will be lower; and (3) chickens on farms the first of this year were up 5 percent.

There is no reason to get out of the poultry business. Safe bet is for farmers to buy the usual number of chicks. Get good chicks and get them early. Aim for an early-fall market.

Early and late markets for turkeys

Despite large production, farmers averaged fairly well on turkeys this year. Buying early poults for August-September marketings and some later ones for Thanksgiving and Christmas markets should be a good hedge and help to average out for the year.

Farm price outlook

Prices for remainder of your 1949 food and feed grains are expected to improve until new 1950 crops come in. Prices of new crops also will compare favorably with 1949 averages—after the harvest rush to market is over next summer.

Meanwhile, look for lower prices of milk and eggs through spring flush—probably down to government support levels of about 80 percent of parity for milk for manufacturing uses, 75 percent for eggs and chickens.

Price ceilings—postwar style

Don't bank on higher-than-parity prices for any commodities in 1950. That's because the Commodity Credit Corporation—with its big stocks of grains and other products—can now put a practical ceiling on your farm products. It can sell any of its stocks for food at not less than 105 percent of current support plus reasonable carrying charges. It can sell flaxseed, soybeans, cottonseed, and peanuts for the extraction of oil at *any* price. It can sell grain for feed at *any* price that will not "substantially" impair price support programs.

Given enough supplies to dump on the markets, the C.C.C. can hold your prices well within parity limits.

Expanding controls

You can expect acreage allotments on all feed grains in 1951—one for corn and another for other feed grains lumped together—particularly if excessive feed results from a shift from corn acreage into other feed grains this year. Controls on hogs and poultry will be sought through controls on feed grains. Later on you can expect no support on *any* crop if you don't comply with the government control requirements on *all* crops. END

THE FAMOUS Firestone

CHAMPION CURVED BAR TRACTOR TIRE in Either OPEN CENTER or TRACTION CENTER Design

SOME farmers prefer Open Center tires, while others demand Traction Center. Regardless of the type *you* prefer, Firestone has it. No one else offers you a choice, because Firestone alone provides both tread designs.

If it's Open Center design you want, see the sensational new Firestone Champion Open Center, Curved Bar Tractor Tire. Try it — for traction, for cleaning, for smoothness on the highway, for all around performance. You'll find it's away ahead of any open center tire ever made.

If it's the Traction Center Tire you want, there's only one — the patented Firestone Champion. This tire has long been recognized by thousands of farmers the country over as the top performer for year-around work. A test on your own farm will show you.

So again we say, regardless of your preference in tractor tire tread design, see your Firestone Dealer, your Implement Dealer, or Firestone Store. There's no need to shop around any more. *Firestone has everything in tractor tires.*

Listen to the Voice of Firestone every Monday evening over NBC

Copyright, 1950, The Firestone Tire & Rubber Co.

Always Buy Tires Built by FIRESTONE, the Originator of the First Practical Pneumatic Tractor Tire

NOW! PROOF THAT BRUSHING TEETH RIGHT AFTER EATING WITH

COLGATE DENTAL CREAM HELPS STOP TOOTH DECAY!

Exhaustive Research by Eminent Dental Authorities Proves How Using Colgate Dental Cream Helps Stop Tooth Decay Before It Starts!

Now, the toothpaste you use to clean your breath while you clean your teeth, offers a *proved* way to help stop tooth decay before it starts! 2 years' continuous research at leading universities—hundreds of case histories—makes this the most *conclusive* proof in all dentifrice research on tooth decay! Colgate's contains all the necessary ingredients, including an exclusive *patented* ingredient, for effective daily dental care. No risk of irritation! And no change in flavor, foam, or cleansing action!

No Other Dentifrice Offers Proof of These Results!

Modern research shows tooth decay is caused by mouth acids which are at their worst right after eating. Brushing teeth with Colgate's as directed helps remove acids before they harm enamel. And Colgate's penetrating foam reaches crevices between teeth where food particles often lodge. No dentifrice can stop *all* tooth decay, or help cavities already started. But brushing teeth with Colgate Dental Cream as directed is a safe, *proved* way to help stop tooth decay!

THE FARMER'S

Washington

By Richard Wilson

- **Democrats figure Brannan vs. Farm Bureau fight is good politics**
- **Left hand of U.S.D.A. doesn't know what the right hand is doing**
- **Artificial food produced by green algae apparently no threat to livestock producers**

Fight is good politics. It does not worry Secretary of Agriculture Charles F. Brannan that he is battling with the head of the nation's biggest and strongest farm organization. Why not? The answer is that the Democrats fully expect to gain Congressional strength in the Midwest in the elections this year because of the *opposition* of the American Farm Bureau Federation to the Brannan Plan.

(*Midwest farmers will have an opportunity to hear all sides of this fight over a farm program when it is discussed in detail at the National Farm Institute in Des Moines February 17 and 18. Both Brannan and Kline have been invited to present their views at the meeting.*—The Editors.)

Democratic politicos remember that the Farm Bureau was not strong for Truman in the last election. They think that the rank and file of the Farm Bureau did not follow its leadership. Therefore, they reason, it makes political sense for Brannan to continue to fight Allan Kline.

One of the bigwigs of the Democratic party nationally told this correspondent recently that he was confident the Democrats would make gains, even in the supposedly rock-ribbed Republican state of Iowa. Democratic strategists will argue the idea that the farmers know they will get at least part of what they want under a Democratic administration.

Two-way farm problem. *The Wall Street Journal* has brought out into the light a problem which has really bothered every reporter who has covered agricultural activities in Washington for many years. *The Journal* says: "The agriculture department can't seem to make up its mind whether it's supposed to increase the nation's farm output or decrease it.

"If you should wander into a third floor office in the department's enormous South building here, you'd find the price-support people shelling out $1.4 billion this fiscal year ending June 30 to keep overabundant farm crops off the market now and head off surpluses that loom for next year.

"Yet, just around the corner on the same corridor, another division is spending $300 million this year in a way that's certain to swell the size of the country's crops. For one thing, this bureau—the Agricultural Conservation Program—pays a farmer as much as $2,500 a year to care for his soil and build up his crop yields.

"Up on the fifth floor there is another office full of experts spending taxpayers' money to help the farmer increase his output. These save-the-soil experts pretty much duplicate the work of the third floor fellows. Main difference seems to be in title—they work for the Soil Conservation Service."

Telephone trouble. R.E.A. is having trouble, Administrator Claude Wickard admits, in getting its rural telephone program started. The trouble is that the private telephone companies are about the only agency which has trained technicians available for the installation and maintenance of equipment.

The telephone companies have trained their own men carefully and they keep them in their own organizations. But Wickard is confident that this problem will be overcome and the program will move along rapidly.

A look into futures. One of the most important farm studies in recent years will be undertaken by the Brookings Institution. It will study the operations of organized futures markets to find out how they really affect the farmer.

Harold B. Rowe, of the Brookings Institution, who will direct it, says: "The study will attempt to clarify important interrelationships between private trading in commodity futures and public programs. It will appraise the merits of, and problems that would be involved in, extending futures trading to additional commodities. Also, it will consider the ways in which farmers and market agencies might best use futures markets."

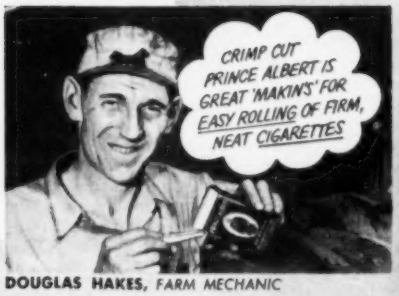
The Brookings people, of course, will have to look into the organized gambling which takes place in the markets and which some farmers feel affects their income. The research will be financed by a grant from the Merrill Foundation for the Advancement of Financial Knowledge, Inc., and by a research contract with the Department of Agriculture.

Artificial food. Don't worry about the scientists' producing food and ruining the business of farmers in your or your son's or your son's son's lifetime. Here is the latest news on the subject:

The Carnegie Institution has entered into arrangements to support experiments and investigation going on at the

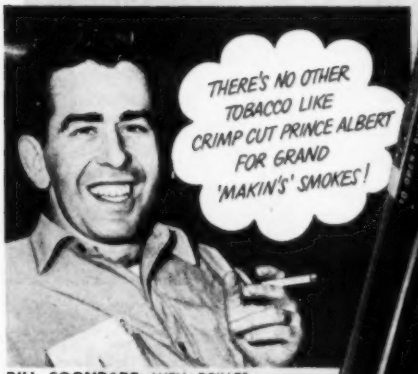
[*Turn to page 89*

Why more men smoke Prince Albert than any other Tobacco—



DOUGLAS HAKES, FARM MECHANIC

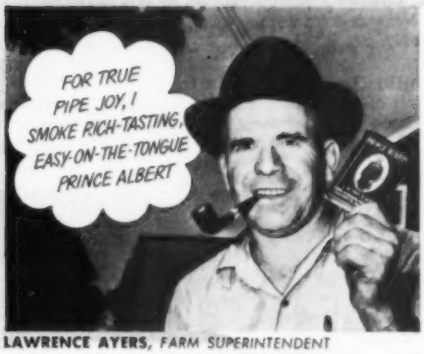
PAUL WUNDER, STOREKEEPER



BILL COONRADT, WELL DRILLER

ALBERT WHITE, SILO CONSTRUCTION EXPERT

CLIFTON SHUHART, ROAD FOREMAN



LAWRENCE AYERS, FARM SUPERINTENDENT

the National Joy Smoke

R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

The choice, naturally mild tobacco selected for use in Prince Albert is specially treated to insure bite-free smoking comfort. And crimp cut Prince Albert's freshness and flavor are locked in the humidor-top pocket tin for greater smoking joy.

What's new in farming®

Tips you can use today

Gasket cutter. A jackknife and 10 cold fingers were never too successful a gasket-cutting combination. Here is a device designed to eliminate both the ragged edges on a homemade emergency gasket, and the cut fingers. A pivoting plastic tool holds a sharp blade and is calibrated for correct measurement. It will cut round gaskets and discs any size from ¼ inch to 6 inches and will also cut odd shapes and straight strips.—*Zimmerman Packing Co., Cincinnati 12, Ohio.*

Mixer-sprayer. This spray gun automatically mixes and sprays either weed- or insect-killing chemicals and needs no bulky supply tank. Designed for use around the yard or farmstead, or inside a stable, the gun receives both its pressure and water supply from an ordinary garden hose. Concentrated chemical is placed in the gun, and a dial is turned to regulate the mixing proportions with the water coming from the hose. To operate the gun, just pull the trigger.—*G. & D. Mfg. Co., Streator, Illinois.*

Self-unloading wagon. This wagon has a 3-foot-wide conveyor, running crosswise of the front of the box. To unload, this conveyor is put in motion and the material immediately over it is carried away. Then, the rear section of the wagon is hydraulically lifted, gradually spilling the rest of the wagon's contents into the conveyor. This system, say the manufacturers, ends all hand forking. The wagon has its own hydraulic pump, operated from the tractor's power take-off.—*Acme Welding and Engineering Co., Cudahy, Wisconsin.*

Hydraulic disc. This new disc trips in and out of the ground like a plow. At the touch of a hydraulic lever on the tractor, it rides out of the soil and onto its own air-tired wheels. At another touch of the lever, it goes back into the ground, to any depth desired. The hydraulic ram, together with the weight of the frame and the fixed-angle discs, makes for deep cutting when needed. Or the disc can be operated at the full angle, yet only an inch or so deep. Tires are carried inside the frame to permit close clearance along fences.—*Smalley Mfg. Co., Manitowoc, Wisconsin.*

Nails are poor cow feed. Over an 8-month period, a strong magnet on the hammer mill feed table at the Ohio Experiment Station collected more than half a pound of nails, wire, bolts, and screws. If the magnet hadn't been there, all this metal would have gone on into the feed being ground for dairy cows. A permanent-type magnet was used.

New early soybean. Monroe, a new early-maturing soybean, has been announced by the Ohio Experiment Station. It is adapted to northern Ohio conditions. It is four or five days earlier than Earlyana and stands better. It is similar to Earlyana in yield and protein content. This soybean variety matures early enough in northern Ohio to permit seeding of wheat after its harvest. Really adequate supplies of seed aren't expected to be available until the 1951 season.

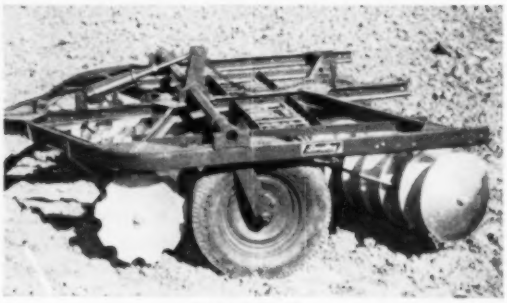
Don't feed infected mash. Tests at Pennsylvania State College indicate that contamination of mash with manure from fowl-typhoid-infected birds can result in an outbreak of fowl typhoid among susceptible birds.

Try these forage mixtures. In Pennsylvania, birdsfoot trefoil and Ladino clover, in combination with other grasses, have given high yields of forage. Combined with tall oat, timothy, reed canary, smooth brome, and meadow fescue, these forages have persisted for four years and have produced from 4,000 to 5,500 pounds of dry matter to the acre. The high-yielding combinations for the past four years have been: timothy with alfalfa or birdsfoot [*Turn to page 117*

Mixer-sprayer

Self-unloading wagon

Gasket cutter



Hydraulic disc

Farmall Super-A with a McCormick A-218 rear-mounted corn planter. IH makes planters in great variety f this 1-plow tractor.

Farmall Cub with the Cub-435 vegetable planter . . . one of the full line of McCormick planters available for this and other Farmalls.

Why you'll like your New FARMALL* *at* PLANTING *time*

*Farmall is a registered trade mark of International Harvester Company

When the season's right and the soil is right, you want to get your seed into the ground *fast*, before the weather changes. That's one of the jobs at which the five Farmall tractors excel.

All Farmalls make those time-saving, pin-point turns, and need only the narrowest headlands. Farmall Touch-Control or Lift-All lets you raise and lower direct-connected planters with finger-touch ease.

You'll find in a Farmall every other feature you want at planting time, too . . . wheel treads adjustable to suit all regular row-crop spacings . . . a clear view of where you're going and what you're doing . . . and a *complete* line of easy-on, easy-off McCormick planters, including the type you need in the right size to fit the Farmall you choose.

Farmall tractors are built *only* by International Harvester. So see your IH dealer. He can arrange convenient payment terms if you wish.

Farmall C with a McCormick C-220 forward-mounted corn planter. Notice how the trim Farmall chassis gives the operator a clear view ahead. You see *both* planting units.

Farmall H, a full 2-plow tractor, planting corn with a McCormick forward-mounted planter which includes fertilizer units, available with all McCormick planters.

Tune in James Melton and "Harvest of Stars"
NBC, Sunday afternoons

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International Harvester Builds McCormick Farm Equipment and Farmall Tractors . . . Motor Trucks . . . Industrial Power . . . Refrigerators and Freezers

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Here's real help in deciding which tractor or tractors will serve you best . . . big, well-illustrated booklets that tell all about each Farmall and what it will do. Check below the booklets you want and mail the coupon today. No cost, no obligation.

International Harvester Company, P. O. Box 7333, Chicago 80, Illinois, Dept. E

Gentlemen: Please send me the booklets on the tractors checked below. I farm _____ crop acres; principal crop is _____

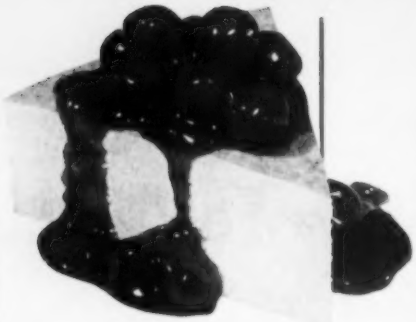
☐ Farmall Cub ☐ Farmall Super-A ☐ Other Farm Equipment
☐ Farmall C ☐ Farmalls H and M _____

Name _____

Post Office _____ State _____

My IH Dealer is _____

2 Ways to STAR *with a* Last-Minute Loaf

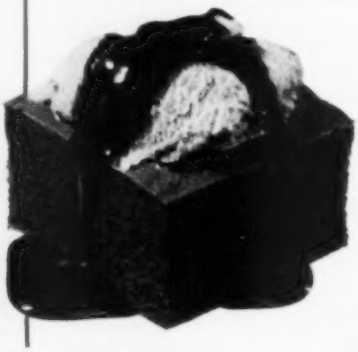


Pillsbury
WHITE
CAKE MIX

Cut your cake plain . . . or cut it fancy . . . and heap on the cherry preserves!

Pillsbury
CHOCOLATE FUDGE
CAKE MIX

A-la-mode your cake with mint ice cream and chocolate sauce.



MILK IS ALL YOU ADD

Simply take milk from your refrigerator . . . a package of Pillsbury Cake Mix from your shelf . . . and make either of these superb loaf cakes! Easy and so quick to make! Pillsbury has combined finest ingredients, blended them together perfectly to give you thrilling success every time. Thrift note: It actually costs less to make fine cake this way than with your own ingredients.

Pillsbury BEST XXXX Mixes

3 Original Rogers Silverplated Teaspoons—Exclusive Lady Ann pattern—only 50¢ and 6 coupon values. Send to Pillsbury, Box 150, Minneapolis, Minn. Write for free premium booklet on Pillsbury Premium Plan. Savings up to 50% on complete silverware service and other valuable articles. Extra-Value coupons with all Pillsbury packages.

You and Ann Pillsbury can make a great team

Ann Pillsbury has developed these new cake mixes in *her* kitchen to save you time in *your* kitchen, and give you perfect results every time.

2 NEW Pillsbury CAKE MIXES

White and Chocolate Fudge

all around *the* house®

Here are tips to help you save yourself some time, steps, and work

● Putting curtains on their rods was a real challenge at our house until we discovered the "wax" trick. Apply a bit of regular floor wax to your curtain rods and you'll find that the curtains slide easily and the rods stay rust-free.—*Mrs. R. K., Michigan.*

● **If you've been disappointed to find the frosting of a bakery cake stuck fast to the inside of its cellophane wrapper, here's something to try. For an instant before you unwrap it, let very cold water from the faucet run over the cake. Then, as the wrapper is taken off, every bit of frosting remains in its place on top of the cake.—*Mrs. D. M., Illinois.***

● If the men in your family use the kind of after-shave lotions that come in attractive pottery jugs, appropriate the empty ones for your own use. Remove the lettering if it's merely a decal, enamel over it if it's not; then pull out the cork and insert a ring of wire through the handle. Two or three of these jugs hung in a group make lovely ivy holders for nearly every room in the house. Incidentally, olive oil bottles and interesting china shaving mugs can be put to work effectively in this very same way.—*Mrs. R. W., Michigan.*

● **The bottom of an overall or pants leg makes a wonderful carryall bag. Sew up**

one end, attach an overall suspender or a denim strip as a handle, and there you have it!—*Mrs. C. D., Minnesota.*

● When pinning costume jewelry on your clothing, hold a piece of felt beneath the fabric. Run the pin through this added thickness and you'll save your favorite garments from damaging pin marks.—*Mrs. L. M., North Dakota.*

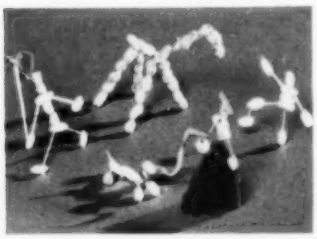
● **Until our "clock game," afternoon naps weren't too highly regarded by my preschoolers. Now, a few minutes after the clock strikes the hour, the children lie down to rest. I tell them they may get up when they hear the clock strike again. Usually, before that time, they're fast asleep. If not, they've had nearly an hour of quiet rest.—*Mrs. A. Y., Michigan.***

● An old whisk broom trimmed to a sharp "V" point makes a perfect "reacher" for dusting elusive couch corners or floor corners and the depths of our favorite easy chairs.—*Mrs. D. B., Nebraska.*

● **My little girl's belts stay tied when I use this sewing idea on her dresses. Stitch two belt loops a short space apart at the center back of the dress waistline. Then run the belt through the loops, tie it so that the bow falls between them, and it will stay neatly tied through work and play.—*Mrs. J. H., Nebraska.***

● Here's a trick for hand-pressing your new winter velveteen or corduroy outfits without matting the surface or leaving any unattractive iron prints. Place a Turkish towel under the part to be steamed. Then, with the garment slightly dampened, press lightly on the wrong side. You'll have highly professional-looking results with no trouble at all.—*Miss K. T., South Dakota.*

● **When my youngster is recuperating from an illness and has to lie in bed, I let him amuse himself with a box of puffed**



wheat cereal. Toothpicks will hold the little cereal pieces together to make all kinds of intriguing animals and figures.—*Mrs. M. N., Ohio.*

● Washcloths which are thin or holey in the middle can be folded in half twice and covered with leftover fabrics to become washable, long-wearing pot holders. If the washcloths are not too well worn, one cloth will make a pair of handy holders.—*Miss D. S., Pennsylvania.*

● **Rust rings caused by setting scouring powder cans on porcelain fixtures can be prevented by edging the bottom of each can with transparent gummed tape.—*Mrs. M. A., Iowa.***

● If you like to sew with feed-sack fabrics, as I do, you'll be delighted with this easy way to remove the last traces of printing from the material. I've found that when it doesn't come out with soap and water, an overnight soaking in kerosene does the trick.—*Miss J. S., Wisconsin.*

Successful Farming will pay $5 for each helpful suggestion published. We cannot return unused suggestions —Editors

SPAM 'N' SCRAMBLED ... *a bountiful breakfast*

FLUFFY EGGS EVERY TIME if you follow this method: Break eggs into bowl; for each egg used, add ¼ tsp. salt, 1 tbs. cream, dash of pepper. Beat lightly with a fork. Melt in skillet enough butter or margarine to coat bottom. Turn heat low, add eggs. Let them "set" slightly. Keep turning edges gently toward center of pan; avoid stirring. Remove from burner before quite firm. Brown SPAM slices in another pan. Serve both on a *hot* plate.

COLD OR HOT SPAM® HITS THE SPOT!

SPAM is a registered trademark for a pure pork product, packed only in 12 oz. cans by Geo. A. Hormel & Co., Austin, Minn.

You'll like **HORMEL CHILI CON CARNE**

THE DIFFERENT CHILI—the kind everybody likes because it's not too hot, not too mild, but just right. Lots of good lean beef... plump red beans . . . a rich, lively sauce. Double your money back if you don't like chili con carne the way Hormel makes it. Merely send sales slip with comments to Geo. A. Hormel & Co., Austin, Minn.

The most prized line ... in America

Most women want to own a set of Revere Ware. The distinctive beauty of these kitchen jewels is positively fascinating! But it is only after *using* them that their delighted owners realize how wonderful they are. It seems hard to believe that the most beautiful thing of its kind could also be far and away the most efficient. Truly the most prized line in America. With Revere Ware, cooking is quicker and easier because you can do it the "waterless" way. Your meals taste better, look better, and *are* better because you preserve the precious vitamins and minerals. You save fuel, you save money, you save worry! Revere Ware is an economical purchase. For it is a lasting investment. It is practically indestructible, you can't burn a hole in it, years of constant use leave its enduring beauty unchanged. No wonder Revere Ware is the most prized line in the world. When you buy it, make sure you get Revere. Insist on seeing the Revere trade mark in the thick copper bottom.

Just a word about America's finest Pressure Cooker—

The gauge on the new 4-qt. Revere Ware Pressure Cooker is hinged, can't come off. You just set the dial and an audible signal tells you when the pressure you want is reached. It opens or closes with just one motion of one hand, is simple to use, and easy to clean. Revere Copper and Brass Incorporated, Rome, Manufacturing Division, Rome, New York.

New arrivals at the Erwin Kjelshus farm

Cover story by Dick Hanson

The event pictured on our cover this month has taken place every year for the last twenty on the Erwin Kjelshus farm, Hanska, Minnesota. Of course, daughter Darlane hasn't always been on hand to greet Ivan Stone and the new chicks.

But Erwin Kjelshus and his wife have been doing business with the Stone Brothers' Hatchery in Hanska for 20 years. Good chicks mean money in the bank later, and the Kjelshuses usually keep about 600 laying hens.

The Kjelshus farm is located in the southern Minnesota dairy and general farming area. However, Erwin calls himself a grain farmer. His 160 acres of gently rolling land produce excellent crops of corn, oats, and soybeans. The corn crop stays on the farm and is fed to the 150 crossbred hogs Erwin feeds every year.

This family has finally achieved the kind of living we think all farmers should enjoy. And they have done it by careful planning and hard work. When they bought the farm in 1936, it was far from being the place it is today.

There was no such thing as "spare time" for the Kjelshus family during those first years on their new farm. Each building was improved as time and money permitted.

Christmas, 1941, was a dark one for the Kjelshus family. Just when they thought they were nearing the end of their rebuilding, their home burned to the ground. They lived in a trailer that winter while a new house was being built. The new house was finished in the spring, and the Kjelshus family moved in.

The new home was the final addition to the farmstead. Of course, landscaping was necessary and the Kjelshuses did a good job. Well-kept lawns now reach out to all service buildings.

Along with rebuilding, Erwin improved his land. Grain farming can't be successful without good soil, so Erwin makes sure "what the crops take out of the soil, I put back in. There's always next year's crop to think of, and the year after that, too."

The Kjelshus family is interested in making money—what good farmers aren't? But they know how to spend their money once it's made, too. First, they planned, worked, and built a farmstead that's hard to beat anywhere. Then they set about to enjoy life a bit more than they could in the past. A family trip to Alaska a few years ago and a new boat for fishing their northern Minnesota lakes will give you an idea of how good, practical farming makes good living for the Erwin Kjelshus family. **END**

NOW! 40% MORE CLEANING POWER

FOR MILK PAILS, MILK CANS, CREAM SEPARATORS, MILKING MACHINES!

No other type suds can equal GREAT new DREFT

now! GOES 40% FURTHER

Without hard scrubbing . . . *new* Dreft quickly dissolves and rinses away milk slime and grease. Dissolves milkstone and prevents more from forming. It washes all your milk containers and equipment *shining clean* in *less* time . . . with *less* work!

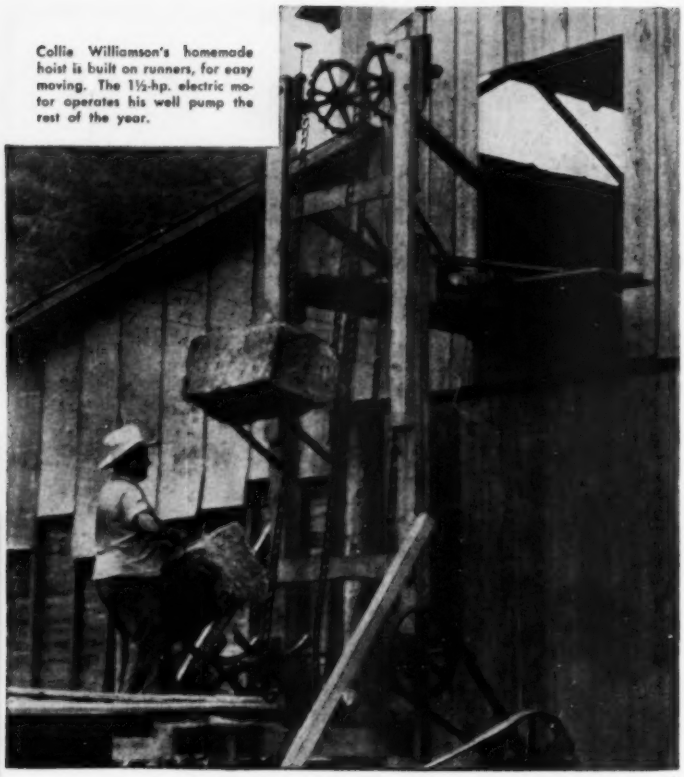
And *new* Dreft cuts bacteria counts to an amazing low—helps prevent loss of butterfat due to milkstone—adds dollars to your dairy income!

Even in hardest well water, new Dreft makes thicker, richer suds . . . gets dishes so clean they *shine* . . . even without wiping! New Dreft is truly beauty-mild . . . now actually one of the *mildest suds* in the world. Leaves your hands *softer—smoother—prettier*. Try it!

now! BEAUTY MILD on your hands

EVERY FARM NEEDS GREAT new DREFT

GET SOME TODAY!



Collie Williamson's homemade hoist is built on runners, for easy moving. The 1½-hp. electric motor operates his well pump the rest of the year.

Homemade hoist cost only $30.00

Collie Williamson, Crocker, Arkansas, found where he could buy a junked warehouse hoist for $30.00 – and it looked to him like the beginning of a baled hay hoist.

He talked to the power company man, and they figured what size motor it would need, how to get wiring outside the loft door, and how to rig pulleys and belts to get the right speed for hoisting. In his spare time, Collie fixed up the old hoist and rigged it, with his 1½-hp. electric motor to run it.

"It saves me one man, and a lot of heavy work at haying time," says Mr. Williamson. "One man drags the bales in to the loft. The man who hauls the bales in from the field loads the hoist. This keeps the truck busy – and gains us many loads a day. And the power costs only 5 cents an hour."

Working closely with power company people, farmers everywhere have discovered hundreds of time-saving, work-saving, money-saving uses of electric power and light. And they know that the common-sense *business* sense of the *business*-managed power companies first put electricity to work on the farm, and found how to get it there cheaply.

America's *business*-managed, tax-paying

ELECTRIC LIGHT AND POWER COMPANIES*

*Company names on request from this magazine.

• *"MEET CORLISS ARCHER" for delightful comedy. CBS—Sundays—9 P.M., Eastern Time.*

Possum Trot Farm

From a farmer's notebook

By Leonard Hall

Perry and I have been up at the barn, this blustery evening, forking down hay for the cattle. Nor do I know of any more satisfying task than tending the stock and seeing them well fed and bedded for the night.

Now Perry has headed for home, down across Saline Creek, where he still has chores to finish. And I've come in to write in front of the fire until Mama calls that supper is ready. Snow-covered boots, sheepskin jacket, and mittens have been peeled off, out on the closed-in back porch, a place which becomes a mighty important part of a farmhouse at this time of the year.

The winter tasks on our grassland farm revolve pretty much around this daily feeding of the livestock, for we're carrying 80 head of Herefords of all ages. Cows and heifers bred for spring freshening are tended up here at the big barn, for they are getting a small ration of ground grain and cottonseed along with their hay.

Moreover, with the calving season almost on us, we want these cattle up where we can keep a close eye on them. The cows with fall calves come in to the small barn down at Perry's, where the calves, even though they aren't weaned, are being creep-fed.

Finally there are the yearling steers which, as long as the weather holds cold and fairly dry, are fed their hay right out on the frozen ground in the fields. There seems to be little more waste there than when we feed from portable racks, and we have found this an excellent way to distribute manure over thin spots in the fields.

A winter's evening before an open hearth fire is a fine time for contemplation. We watch the flames dancing upward from the logs of solid white oak and think how here is the stored-up sunlight of two centuries being released for our enjoyment and comfort.

But one need not trace the sunlight back so far on winter evenings. Just an hour ago, breaking open the bales of fragrant hay at the barn, I found a great spray of black-eyed Susans. Their bright gold gleamed in the dusk of the barn loft as clearly as it did in the hayfield on that day last summer when the sickle of the mower laid them low. And I imagined I felt for a moment the heat of the summer's sun on those long, hot days when the hay was coming into the barns.

[*Turn to page 18*

B.F. Goodrich

POWER-CURVE CLEATS

More power, more traction, than ever before built into a tractor tire

HERE'S an entirely new principle in tractor tire tread design. A principle which gives you less slippage, greater self-cleaning, more power and longer wear. It's the Power-Curve cleat design.

The Power-Curve is not just a curved cleat. For maximum self-cleaning, the Power-Curve is designed according to a scientific formula so that the distance between each cleat is exactly the same at the center of the tread as it is at the shoulders. And the cleat ends are reinforced at the center to give a deeper bite.

This great new tire outpulled other leading makes in hundreds of tests in different parts of country. When tested side by side with other tires, the new Power-Curve outwore them all. Many farmers will get as much as ⅓ more wear!

Compare the 3 leaders before you buy. Examine the tread designs. If you can, watch them perform. We think you'll select the B. F. Goodrich Power-Curve on every count. *The B. F. Goodrich Company, Akron, Ohio.*

POWER-CURVE CLEATS *are exactly parallel (by mathematical formula) to allow natural self-cleaning.*

CLEATS *are reinforced at tread center where you want deepest penetration. Prevents bending, too.*

CLEAT ANGLE IS BEST BY TEST! *Correct for maximum traction—maximum cleaning.*

RAISED EDGE *at cleat shoulders gives extra traction when tire sinks into loose or sandy soil.*

FURROW STRIP—*another new feature. This band of thick rubber on sidewall gives added protection where tires usually wear due to rubbing on sides of furrows.*

HIGHER CLEATS *penetrate deeper, give extra traction.*

OPEN CENTER *allows cleats to dig in at center of tread where traction is most important. Aids self-cleaning.*

RESEARCH KEEPS B.F.Goodrich FIRST IN RUBBER

WHY BUY INSURANCE THROUGH AN AGENT OR BROKER?

FOR MANY REASONS, all of which add up to one big reason—*your protection!*

Since the business of insurance is highly technical, you need the services of a skilled professional man to guide your final selection—as to kind and amount; as to risks covered, and risks omitted.

Your local agent or broker *is* that professional man. He takes it as his responsibility to see that you buy no more protection than you need—and certainly no less.

As a professional man, he is examined and licensed by the state—in the same way doctors, lawyers, accountants are licensed—for your complete protection.

He guards your interest by placing your insurance in sound, strong companies and by being on the spot to help you, when you have a loss.

Rely on your local America Fore Insurance Man for sound insurance protection—and for full, friendly help in settling claims! To locate your nearby America Fore Insurance Man, call Western Union by number, ask for Operator 25.

THESE FIVE COMPANIES COMPOSE THE AMERICA FORE INSURANCE GROUP

CONTINENTAL • FIDELITY-PHENIX • NIAGARA • AMERICAN EAGLE

FIDELITY AND CASUALTY COMPANY OF NEW YORK

BERNARD M. CULVER, Chairman • FRANK A. CHRISTENSEN, President

America Fore INSURANCE GROUP

Farmer's notebook

[*From page 16*]

The thought came to me there of how the rhythm of the country year fits far better into the make-up of the human system than does that of the industrial city or town.

There, in office and factory, the pace does not change. The number of gadgets to be produced in January is often the same as in June, for the labor is at hand and the raw materials have been stockpiled toward that end. Vacations come in July or August—short weeks when everyone goes away to play as hard as he has previously worked.

Toward winter's end, perhaps in March or at the beginning of April, comes a season of physical and mental letdown to city dweller and farmer alike. In town, the last reserves of energy must be called on to keep the production line rolling, for there are no seasonal rhythms in the factory schedule. It is a mechanical thing, from which must be eliminated all possible variables caused by the human element.

Consider how different is the pattern of the farm year. True enough, we also have mechanization; and there are jobs, like the care of the dairy herd, which run steadily along throughout the year. Yet most tasks fit themselves to the seasons, following closely on the activities of nature.

Now the fields are asleep, the days are short; the sun is in the winter period and decrees these things. We feed our livestock on sunlight stored at harvest time. For the rest, we repair the machinery, do odds and ends of carpentry, get out firewood and fence posts. Nor do we hesitate to take a morning off to go rabbit hunting after a new fall of snow has covered the fields.

Come March and April, and the earth awakes. Once more the eternal circuit starts. Soil, air, and water come alive to the sun's rays. Roots stir in the earth, leaves unfold, plants push upward. And as the flow of energy increases with the lengthening day and growing warmth of the sun, so do the tasks of the farmer.

Then is the season to plow and plant, to seed the clover on fields of winter wheat or rye or barley. Then we haul out manure from the barns to further speed the growth of crops. Then come the young calves and the lambs which, almost more than any other creature, tell of the awakening of spring.

Summer, autumn, and winter follow in their turn; and with each the life of the countryman is in tune. But now, in winter, a man can spend a day, if he so desires, tramping his farm to see how the bobwhites have survived the last snow. He can follow a fox track down along the creek, or look to see what shrubs the deer are browsing, over on the far side of the mountain.

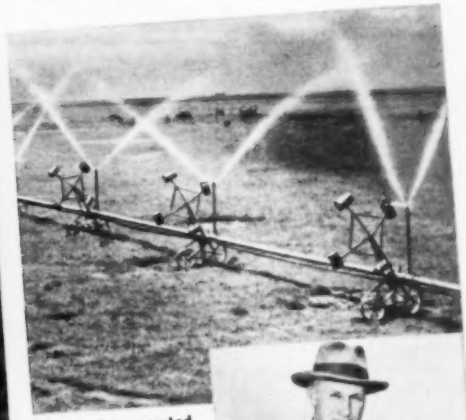
Finally, when evening chores are finished and all is snug for the night, the farmer may sit before his fire with cider glass and apples brought from the store in the cellar and lay his plans for the year which lies ahead. Nor will these be wholly concerned with wringing the last dollar from his acres, but rather with how they can be made more productive in this season and in future seasons. **END**

STANDARD

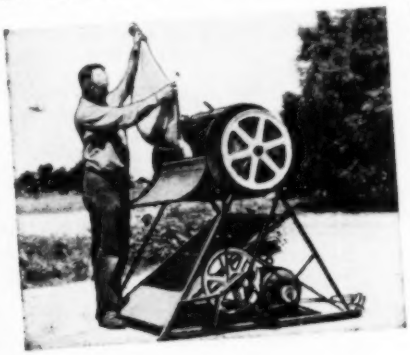
FARM NEWS-GRAPHIC

A picture review of successful farming brought to you by the Standard Oil Company

Super tubers are raised by Earl E. Sohlden of Chassell, Michigan, who had a 1948 yield of 492 bushels per acre and took second place in the Fifteenth Annual Houghton County Potato Show. The contest is based upon the yield check of five acres and the exhibit at the show. Sohlden farm has twenty-four pieces of heavy power equipment and an irrigation system. "I use Standard Red Crown Gasoline and Permalube Motor Oil exclusively for power and lubrication, and get wonderful service from Agent Frank Burkman," Mr. Sohlden said.



Water where wanted is delivered by the self-propelled field watering system pictured in operation above. It is the invention of Raymond Bird, seen at right, who farms near Sublett, Kansas. It is operated on the principle of the overshot water wheel. Part of water which does the sprinkling also provides the power to move the device across the field. The sprinkler can be adjusted to move at speeds ranging from one foot to thirty feet an hour. The fact that it is self-propelled saves a great deal of farm labor, it was pointed out. Mr. Bird is a steady user of Standard Oil products, including Red Crown Gasoline and Bovinol Stock Spray with Methoxychlor, in his farming operations.



Ingenious Gene Alford might be a good title for this progressive Simla, Colorado farmer who was snapped operating a feed mixer which he made from an old steel barrel. It can be easily moved and is operated by a small motor. He uses it to mix his poultry and livestock feeds and to treat his seed against disease, and says it saves him time and money. "Yes, and I save time and money too, by using Permalube Motor Oil," said Mr. Alford.

Your Standard Oil Man

Friend to Friend

Faith of our fathers

Faith, courage, and the will to work out one's own salvation are no longer among America's surplus commodities.

Once, they were. Our land was settled by men and women whose faith carried them across a dangerous ocean. They made their own plans, used their own hands to fashion a life which has become the envy of the world. In their houses of worship they freely offered fervent thanks to Him whose blessings they so richly shared, then worked the harder on the morrow.

Even as we today, they craved security. Security of mind and body. And they found security—in faith and toil.

Theirs is a lesson we will do well to remember. It is a lesson often, seemingly, ignored. Many of us seem to doubt our individual faith, our individual ability to fashion security through honest, rewarding toil.

Have we so changed? Has our land so failed that men must huddle in collective groups, hands outstretched to other groups of men? Are we ready, now, to trade our freedom which has cost so dear, in return for promises of effortless security? There is no such thing.

In times like these, it is doubly heartening, then, to witness evidences of strength, signs of faith in men and things American. Let me call to your attention one such welcome sign.

It is a holiday message, prepared and paid for by Swift & Company. You will do well to turn back to page 58 of the December issue of *Successful Farming*. Read it through again, thoughtfully.

Like any good piece of advertising copy, it has something to sell. In this case though, it is not tooth paste, ham, or farm machines. It is our way of life—free, prosperous, unregimented. And, like many ads, it names a price. The price is faith, and work, and courage to proceed.

It calls to worship those of us who value liberty. For those among us troubled by the worries of the time, it offers hope. The hope of Christ, "Our help in ages past—our hope for years to come."

Purebreds

Judging from pictures in sales catalogs and breed magazines, purebred beef cattle have walked through a lot of deep straw in 30 years. I thought of this at last year's International Livestock Show, as I watched the photographers working hard to please their customers. Apparently legs on beef cattle are something to be ashamed of and to be concealed, as our grandmothers used to feel about ankles.

But seriously, after 30 years attendance at this and other great livestock shows, I have failed to note that the steaks tasted any better, or the breeder or feeder made any more money. And with all this talk about a return to grass farming, it occurred to me that possibly legs under a critter long enough to permit him to scramble after grass might be an important asset.

The editors of *Successful Farming* recognize the tremendous contribution made to American agriculture by the breeder of purebred livestock. We believe he is a vital element in a program of maintaining high quality and efficiency.

We also believe, however, that in the last 30 years there has been too much attention given to maintaining the trademark of the specific breed, and not enough thought given to the usefulness of the breed in the hands of the commercial farmer. Our interest must be chiefly with the latter, as all breeds now have excellent publications for the producers of breeding animals.

The times call for boldness among the breeders of livestock. Certainly all the superior germ plasm in the world has not been brought to the United States as yet. Many believe we have exhausted the possibilities of Europe, but after all, that is only a small spot as world livestock possibilities go. We need imports and also concentration of the valuable material already at hand. We congratulate the swine breed associations for their courage in stimulating production records for sows and litters. The beef cattle men must come to this program. The breeders of purebred dairy cattle are boldly accepting new programs for the improvement of their animals. Sheep breeders are pretty largely bound to a dead past.

In general, we are in full agreement with the producers of purebred livestock, except that we think they should be doing more. We have criticisms, though, mainly aimed at attempts to sell —for breeding stock—too high a percentage of the total animals produced.

D. Howard Doane, head of a well-known farm management firm, said recently, "Our concept of what has been desirable in beef cattle, for example, has been built upon two very significant factors; that is, show-ring type and heavy grain feeding for long periods in Cornbelt dry lots.

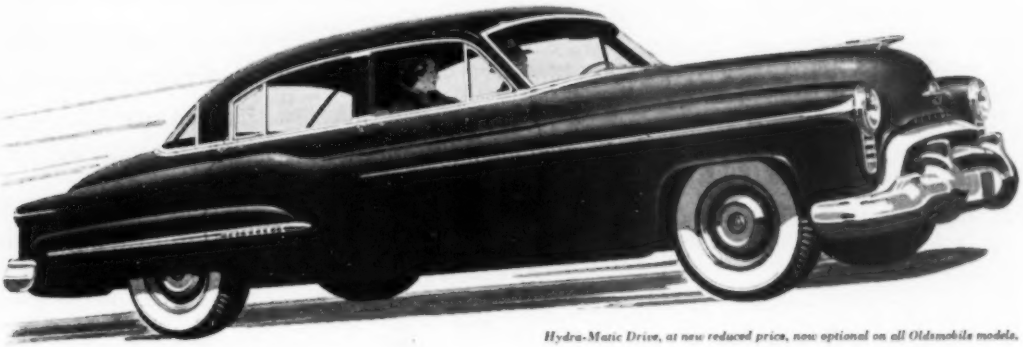
"To meet these standards we have bred short-legged, compact, fine-bone types of cattle. We now propose a program calling for maximum use of roughages—pasture and hay. Will our current types best fit these requirements? I think not."

We shall focus our attention on the ability of farm animals to produce high-quality meat and milk economically. Whether they have two rings or three rings around their tails or necks will not impress us, unless such trademarks signify actual efficiency of the animals.

Long live purebreds! In any system of livestock improvement, we must have this seed stock from which to start. We shall not hesitate to present ways and means to stimulating the livestock breeder to maintain the rapid pace of improvement now set for all branches of agriculture. It is no time for vested interests to function!

Kirk Fox

OLDSMOBILE ROCKETS AHEAD!



Hydra-Matic Drive, at new reduced price, now optional on all Oldsmobile models.

GLAMOROUS NEW FUTURAMICS! BRILLIANT "ROCKET" ENGINES! NEW WHIRLAWAY HYDRA-MATIC DRIVE!

Your Oldsmobile dealer invites you to meet . . . Oldsmobile's *New* Futuramic Fleet! See the Futuramic "98"—Oldsmobile's *glamor* star! "Rocket" Engine! New Whirlaway Hydra-Matic! Lowest, widest Fisher Body in Oldsmobile history! See the newly styled Futuramic "88"—Oldsmobile's *action* star! "Rocket" performance now even *smoother* with new Whirlaway Hydra-Matic! See the Futuramic "76"—Oldsmobile's *value* star! It's the lowest-priced Futuramic car! "Big Six" Engine! And naturally, Hydra-Matic Drive! See them all! Take your choice! Futuramics! "Rockets!" Hydra-Matics! Finest Oldsmobiles ever!

A GENERAL MOTORS VALUE

Get *PROOF* that the Ground Breaking Tools

High yields start with good seed beds, prepared in the least possible time and at lowest possible cost. That's where Ford Tractor Owners cash in—on low first cost of their equipment—on time and labor saved—and on low costs of operation. Tens of thousands of Ford Tractor owners are proving this on farms in every part of America this year. *You* can prove it with a demonstration right on your own farm without obligation. Just tell your nearest dealer that you'd like to see for yourself what Ford Tractor *full two-plow performance* means in better, faster, more economical ground breaking and seed bed preparation.

DEARBORN MOTORS CORPORATION • DETROIT 3, MICHIGAN

FARM PROFITS START *RIGHT HERE*

DEARBORN MOLDBOARD PLOW gives what farmers want: even depth, clean cut furrow and a well-turned furrow slice.

Ford® TRACTOR

Your Ford Tractor Dealer is a good man to know better

Look for the sign that says "Ford Tractor". It identifies your nearby Ford Tractor dealer, the man who sells and services Ford Tractors and Dearborn Farm Equipment. You can depend on him for practical power farming help, for genuine parts and dependable mechanical service. He's a good man to know better and you'll always find a welcome at his store.

Ford Tractor and Dearborn pay *BIGGER RETURNS*

FROM IOWA: "Have plowed wet ground where another tractor almost stuck just passing through." L.J.F.*

FROM WISCONSIN: "One could never believe the power they (Ford Tractors) have for plowing until you use one yourself." M.G.S.*

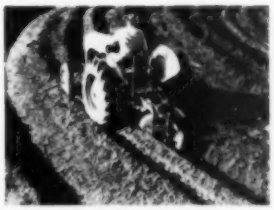
FROM WYOMING: "Have compared my Ford against (three other tractors) with two bottoms and out-plowed them all on heavy soil." J.S.*

FROM NEW YORK: "The Ford Tractor will plow on a side hill where other tractor could not plow." A.A.*

FROM WASHINGTON: "With the Dearborn Plow, it is much easier to plow peat and trashy ground." J.H.*

FROM NORTH CAROLINA: "The hydraulic lift saves strain on muscles and lifts plows for easy turning." A.F.C.*

**Names and addresses of farmers quoted above will be supplied on request.*



DEARBORN DISC PLOW and Ford Tractor are great for very "difficult" soils. Fine also for making terraces.

DEARBORN TWO-WAY PLOW throws all furrows one way; fine for use in irrigated farming or hillside plowing.

DEARBORN MIDDLEBUSTER makes seed beds for listed or bedded crops. Attachment available for planting.

TOWNER LIFT-TYPE OFFSET DISC HARROW does a fine orchard job. Offset feature enables it to get in under the trees.

BUY ON PROOF.

Ask for a demonstration on your farm

A tractor is an important investment. And no matter how good a tractor looks in the advertisements or in the dealer's store, the real pay-off is how well it will do what *you* want done on *your* farm. That's why we urge you to *"Buy on Proof"*— and the kind of proof we mean is an actual working demonstration on your own farm. Don't just take our word about how good the Ford Tractor is and what it will do. Ask your nearby dealer for a demonstration and BUY ON PROOF.

Dearborn
FARM EQUIPMENT

COPYRIGHT 1950, DEARBORN MOTORS CORPORATION

Ford Farming MEANS LESS WORK . . . MORE INCOME PER ACRE

Fight Tooth Decay and Guard Your Gums Both!

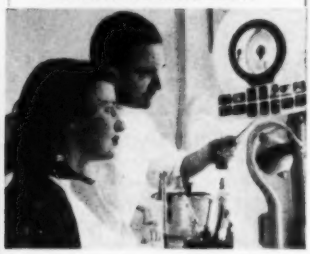
Dentists warn you must do both to save your teeth. You can help prevent tooth decay as you guard your gums—with doubly-effective Ipana care!*

Naturally, you know how important it is for you to help prevent tooth decay.

But you may not know that *gum troubles cause even more tooth losses than decay does!* And whatever your age—even if you're in your teens—gum troubles can strike you almost without warning!

*You and your family can help prevent tooth decay and gum troubles BOTH—with doubly-effective Ipana dental care.** Read how below.

DENTAL SCIENCE EXPLAINS HOW IPANA FIGHTS TOOTH DECAY!



Science says that tooth decay starts with acid-forming bacteria trapped in a sticky coating on your teeth. Every time you use Ipana, it fights decay by helping remove this bacteria-trapping coating. *No other paste or powder has been proved more effective for fighting tooth decay.* And Ipana is the *only* leading tooth paste specially designed to promote healthier gums.

DENTISTS SAY THE IPANA WAY PROMOTES HEALTHIER GUMS!

***The Ipana way** is doubly effective. In recent reports, 8 out of 10 dentists say it promotes healthier gums—*just as important as fighting decay.* Here's all you do. **1.** *Between regular visits to your dentist,* brush all tooth surfaces with Ipana at least twice a day. (Ipana's own formula helps prevent decay—leaves teeth cleaner.) **2.** Then massage gums the way your dentist advises. (Ipana's unique formula also stimulates circulation—promotes healthier gums.)

THEY PROTECT TEETH AND GUMS BOTH—THE IPANA WAY!

This Plainfield, N. J. family believes in *complete* dental care! Mrs. William Huston, a top photographers' model, knows that healthy teeth and healthy gums are *both* "musts" for a successful smile. So she makes sure her whole family fights decay and gum troubles, too—the Ipana way! Give *your* family this same doubly-effective dental care. Get Ipana today!

Product of Bristol-Myers

HEALTHIER TEETH, HEALTHIER GUMS— IPANA for Both!

Good films for home or meeting

The Earth and Its Peoples, a series of some 20 films produced by Louis de Rochemont, famed specialist in dramatic film photography. Each film tells the story of agriculture, community life, and living habits of a section of the United States or a foreign country.

Midwesterners will be interested particularly in their own story, **Cattle and the Cornbelt.** The film draws a clear picture of the part the Midwest farmer plays in the total world scene. Story opens in the wide open spaces of the West where cattle are grazed and shipped to the Cornbelt for fattening. It unfolds through the activities of a Midwest farm family who produce feed and market the cattle and hogs. On their work and that of their neighbors depends the existence of millions of people in cities and towns.

The series is distributed through United World Films, Inc., 105 East 106th Street, New York 29, New York.

Baby Meets His Parents: What makes people different? Why are some confident and well adjusted to society, while others feel insecure, inadequate? "It all starts in babyhood," says the narrator of this film. "We grow according to heredity, but our personalities develop according to the way we are cared for and treated in the early days of life."

This film, which is highly recommended by child development specialists, portrays the effect parents have on their infant's personality by the way they fulfill his basic needs. Baby feels secure and learns to trust people only if the family gives him love and care, and he is allowed to develop in his own way.

Produced by Encyclopaedia Britannica Films, Inc., 20 N. Wacker Drive, Chicago 6, Illinois.

Finding Your Life Work is something like fishing. To be a success in either, you must use the right bait. In choosing a job—and landing it—your personality, training, and experience are your required bait.

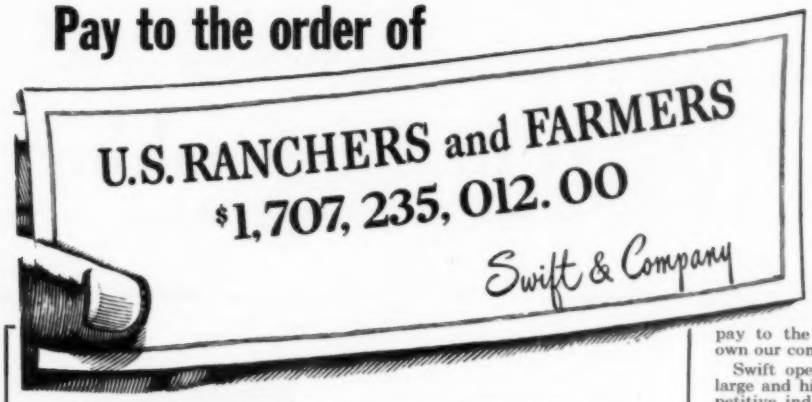
From the above comparison, this vocational guidance film progresses to a discussion of how to study yourself objectively, discover your likes and dislikes, your weaknesses and strong points. It shows you how to get a broad view of many vocations and measure your qualifications with the work involved in each.

All high-school students and parents will find the film a helpful guide for job study. Produced by Vocational Guidance Films.

Rehearsal. Behind the scenes of the Bell Telephone Hour with Ezio Pinza and Blanche Thebom accompanied by the Bell Telephone Orchestra. If you like good music, this is for you. Distributed by the Farm Film Foundation, 1731 Eye Street, N. W., Washington 6, D. C.

To rent these films, write to the Visual Education Distributing Department of your state college or university, or directly to the distributor. Above films are for 16mm sound projectors. **END**

Pay to the order of



You and We Are Both in the Livestock-Meat Business

And we both know mighty well that big sales don't mean big earnings. There's a whale of a difference between gross and net. Here are some of the things which make that difference:

WE BOTH BUY RAW MATERIALS

There's your breeding stock and feeding stock . . . raw materials without which you can't do business. We, too, buy raw materials. Hogs, lambs, cattle and calves, dairy and poultry products, cottonseed, peanuts and soybeans—take the greatest part of the dollars we receive from sales.

WE BOTH BUY NECESSARY SUPPLIES

You've got to have fertilizer, seed, grass, hay and grain . . . We must buy salt, boxes, barrels, shipping cartons, thousands of items. They cost 4.5 cents per dollar of business done.

WE BOTH PAY WAGES

You pay hired hands; veterinarian and other fees; costs of haying or other contracted jobs; living costs of members of your family who work on the place . . . Likewise wages and salaries take a big bite out of our sales dollar; $237,519,974 last year: 17 times as much as paid in dividends.

WE BOTH PAY TAXES

You pay real estate, property, income, excise and other taxes. We pay taxes too . . . in every state in the Union and in hundreds of counties and municipalities . . . Taxes must be deducted before we, or you, can show any net profit. Last year our taxes totaled $31,042,994.

WE BOTH MEET TRANSPORTATION COSTS

Gasoline, tires, auto and truck repairs cost you money. Last year transportation cost *us* $50,078,225. That's a necessary business expense.

WE BOTH CARRY INSURANCE, ETC.

You have "incidental" expenses . . . telephone, electric light, heating, insurance policies, interest, depreciation. We have all those, plus many others, including cost of research laboratories and test kitchens; of retailers' merchandising aids . . . In 1949 our "incidentals" added up to $61,737,271.

IF WE WORK HARD AND MANAGE WELL, WE BOTH MAKE SOME PROFIT

Some people, seeing only the big figure of gross sales, say, "What profitable businesses ranching, farming (and meat packing) are!" They don't stop to think that most of what comes in goes right out again. In our case about 99c of the dollar went out to other people or businesses . . . and about .6 of one cent went to the 64,000 shareholders who invested their savings in our Company.

AND, WE BOTH PLOW BACK SOMETHING INTO OUR BUSINESS

You re-invest part of your "profit" in new buildings, equipment, machinery, etc., to keep your operation efficient. We follow the same prudent business practice. Into reserves for such purposes went about half of our 1949 net earnings of $25,826,129.

THIS IS OUR YEARLY REPORT to our friends—and business associates—on America's farms and ranches.

It tells you how much business Swift & Company did during 1949 . . . what we took in from the sale of our products . . . how much we paid out for our raw materials, and all the many costs of doing business . . . and what was left over to plow back into the business, and to pay to the 64,000 sha eholders who own our company.

Wm. B. Traynor

Swift operates in a large and highly competitive industry . . . an industry which provides a nationwide market for livestock, and supplies a nationwide demand for meat products, at very low cost.

One pair of facts will probably interest you more than most others. Namely, out of each 1949 dollar that we took in from the sale of Swift products, we *paid out* just about 99 cents. And of that 99 cents paid out, 77.1 cents went to you farmers and ranchers in payment for the meat animals, poultry, eggs, cream, oil seeds and other agricultural products you sold us.

We print this report to agricultural people because there is such a close interest between us. You and we deal together every working day of the year. You get a large part of your yearly income from what you sell to meat packers—Swift and others. And it's from you that we get the raw materials of our business.

Here are the main facts about our business during 1949.

Vice President & Treasurer
Swift & Company

Quick Facts About Swift's Business in 1949

Our Total Sales were	$2,213,160,242
Our Net Earnings were	$25,826,129

Here's how our average sales dollar was spent:

For Livestock & Other Agricultural Products		77.1c
For Employes' Wages & Salaries		10.7c
For Supplies		4.5c
For Transportation		2.3c
For Taxes		1.4c
For Other Business Expenses		2.8c
Total spent out of each average dollar		98.8c
Remaining as Earnings for Swift:		
—to shareholders as dividends	0.6c	
—retained in the business for future needs	0.6c	1.2c
TOTAL		100.0c

Swift & Company

UNION STOCK YARDS, CHICAGO 9, ILL.

Nutrition is our business—and yours

What's new in homemaking

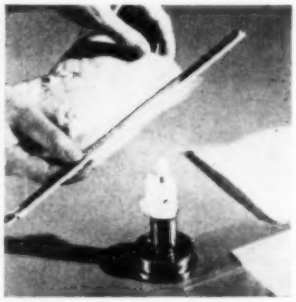
Grater wonders come with the Shred-o-Mat, as it lightens your grating, slicing, and shredding chores.

The three, stainless-steel discs are interchangeable, prevent rusting and discoloring. The Shred-o-Mat has an aluminum hopper and a chrome base, comes in yellow, red, or white, $5.95; all chrome, $7.98. Look for it at department and hardware stores. —*Rival Mfg. Co., Truman Road and Wabash, Kansas City 1, Missouri.*

Better breakfasts with the Bacon-Egger. This device fries bacon flat, dries it hot, and uses the fat drip-

pings from the bacon to fry the eggs. The eggs are fried while the bacon is drained; both are ready to eat at the same time. Bacon-Egger also can be used for frying hamburgers, making hot cakes, grilling franks and sandwiches. Of chrome-polished steel, with heat-resisting handle. Postpaid, $2.95. From *Homemaker's Haven, 730A 37th Ave., Jackson Heights, L. I., New York.*

Quick-seal your frozen foods in plastic bags. Easy-to-apply labels mark the contents. All this comes in Laminet's new plastic-bag kit. The welding bar is snapped over the end of a filled bag—the plastic is brought in contact with a candle or other flame, sealing the bag. This quick operation produces an amazingly strong, airtight seam. Postpaid, $4. Available through hardware and de-



partment stores, or direct from *Laminet Cover Company, 14 N. Michigan Ave., Chicago 2, Illinois.*

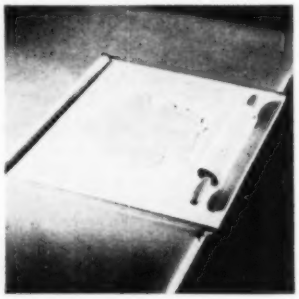
A paintbrush jacket to keep your paintbrushes in perfect shape and good working condition. Clamp the brush in the jacket; stand the jacket in turpentine. Legs will keep brush out of the heavy pigments which collect in the bottom of the container. Jacket shapes the brush to

a chisel-edge as it rests in cleaner. Postpaid, $2.—*Acorn Mfg. Co., 1207 Keosauqua, Des Moines, Iowa.*

Shapely cookies from this easy-to-use Mirro cooky press. It has four legs to set firmly on a cooky sheet while

you merrily turn out hearts, stars, camels, trees, dogs, and butterflies. Barrel holds enough dough to make 80 cookies at one filling. Recipe and direction folder included. In hardware, department, and other retail stores. Postpaid, $2.50 East, $2.75 West. From *Aluminum Goods Manufacturing Co., Manitowoc, Wisconsin.*

Dough magic with a nonstick pastry canvas. Flour underneath dough won't skid or move away, nor



will dough pick up extra flour. The knitted cover prevents dough from sticking to rolling pin. The frame holds the canvas flat—preventing it from slipping. The standard set comes in a pliable plastic bag at $2.95. The de luxe set, $3.95, has a rigid, round tube for a storage container. Available in hardware and department stores, or postpaid from *Doughmaster, Inc., Owatonna, Minnesota.*

More on page 72

No wonder you women buy more TIDE than any other washday product!

TIDE'S GOT WHAT WOMEN WANT!

NO SOAP-NO OTHER "SUDS"-NO OTHER WASHING PRODUCT KNOWN-WILL GET YOUR WASH AS CLEAN AS TIDE!

ONLY TIDE DOES ALL THREE:

1. A CLEANER WASH!

Yes, Tide will get your wash *cleaner* than *any* other washing product! (Tide, unlike soap, removes both dirt *and soap film*.) No wonder *more* Tide goes into American homes than any other washday product!

2. A CLEANER WHITE WASH!

Tide will get your shirts, sheets, towels dazzling white—a *cleaner* white than any other washing product you can buy. And Tide *keeps* them dazzling white week after week!

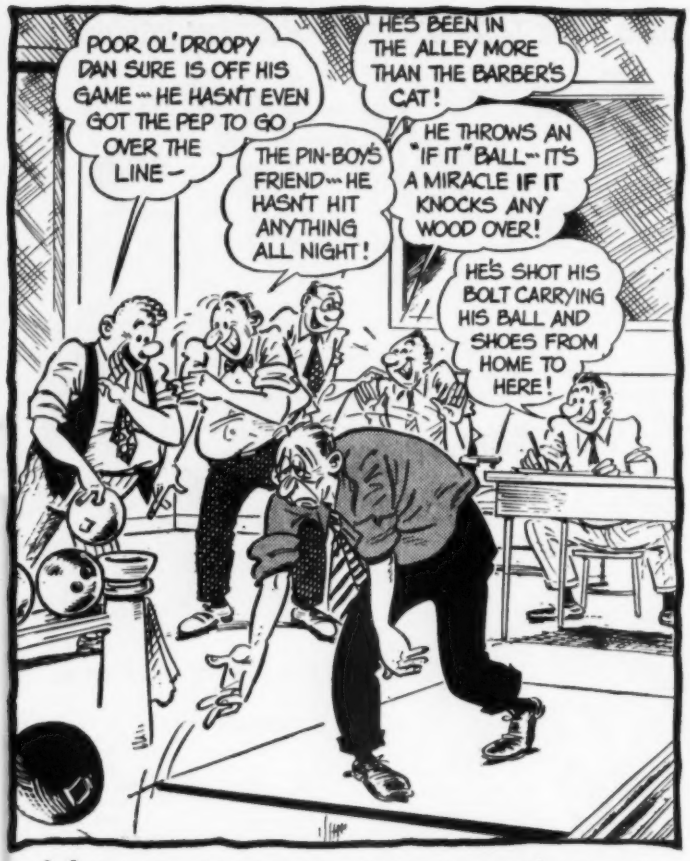
3. A CLEANER BRIGHT WASH!

Trust all your washables to Tide. With all its cleaning power, Tide is truly *safe* . . . and actually *brightens* soap-dulled colors.

GET TIDE TODAY!

Guaranteed by Good Housekeeping

TIDE GETS CLOTHES CLEANER THAN ANY OTHER WASHDAY PRODUCT YOU CAN BUY!

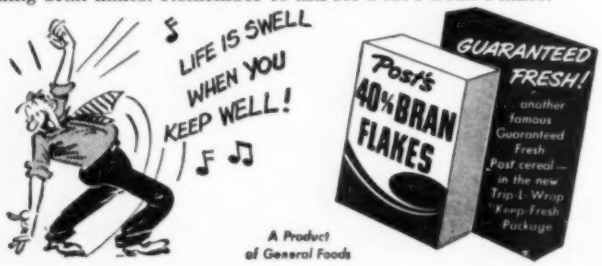


MAYBE IT'S SOMETHING HE DIDN'T EAT!

Next time, dazzle 'em, Dan! Maybe that logy, listless feeling comes from irregularity due to lack of bulk in your diet. Try the "ounce of prevention" in Post's 40% Bran Flakes . . . the cereal that gives you the three extra keep-fit benefits:

(1) bran to help prevent irregularity due to lack of bulk in the diet
(2) whole-wheat values of these essential B vitamins: thiamine and niacin
(3) good source of these important minerals: phosphorus and iron

You'll wake up with a smile when there's Post's Bran Flakes for breakfast! It's bran in its most delicious form . . . toasted to a mouth-watering golden crispness. No wonder it's America's largest selling bran flakes. Remember to ask for Post's Bran Flakes!



A Product of General Foods

There's still time for your March of Dimes

FIGHT INFANTILE PARALYSIS

By giving generously to the March of Dimes, sponsored by the National Foundation for Infantile Paralysis, January 16-31, you will be helping boys and girls overcome the effects of polio.

Much money will be needed in 1950, probably more than the 31 million dollars the Foundation spent in 1949. You'll find a genuine pleasure in donating as much as possible to this cause.

The Foundation spends its money principally in helping boys and girls, men and women hit by polio to regain their health, and in supporting research aimed at eventually stopping polio and wiping out this dreaded disease.

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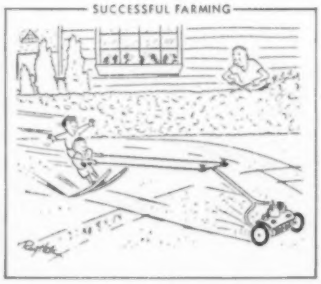
SUCCESSFUL FARMING



you can't **STOP** the snow . . .

But there are some things you can do to protect yourself against it. As a matter of course, a man puts up some snow fence and lays in a good fuel supply when it's needed as insurance against a heavy winter.

It is just as much a matter of course that a man should safeguard himself and his family through adequate life insurance protection.

You can't regulate your life span any more than you can stop the snow, but you can make sure that your family is economically protected in case of your sudden death. *And* you can make sure that you have a comfortable income as you grow older.

Life insurance and life annuities protect you and your family, and they do so at a cost that practically everyone can easily afford.

For protection's sake, check your insurance program with your Equitable representative.

THE EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES

THOMAS I. PARKINSON · PRESIDENT

393 SEVENTH AVENUE • NEW YORK 1, NEW YORK

1. If baby is bald, should you worry?

If your neighbor's baby has curls while yours has just fuzz, don't fret! Many babies don't grow much hair till they're a year old. In the meantime, use pure, gentle Johnson's Baby Oil to help keep baby's scalp smooth, free from "cradle cap." Use also for daily "smoothovers" after baby's bath, at every diaper change.

2. Does a new baby have a "language"?

Yes—not words, but music! Every baby has several special cries—listen carefully and you'll learn to recognize the hunger cry, boredom cry, pain cry! A cross, fretful wail often means little chafes and prickles are bothering baby—help keep his skin smooth and free from irritation with frequent sprinkles of soft, silky Johnson's Baby Powder!

3. Should grandmothers have a say in bringing up baby?

For advice on baby's health, your doctor is your best bet. But grandmas *are* gold mines of work-and-worry-saving tips! They'll approve Johnson's Baby Products for baby's nursery tray just as your doctor does. Johnson's Baby Products are made specially to agree with baby skin—more mothers buy them, trust them, than all other brands put together.

Furnishing, Remodeling, and Building Helps for Your Home

In cooperation with *Successful Farming*, the stores listed below maintain a permanent Home Planning Service to give you assistance without cost or obligation. Through this service, the dependable advice and ideas of *Successful Farming* editors are offered by leading stores in your area.

In addition, farm home plans, service building plans, books, booklets, and other materials are available for your inspection and purchase.

Illinois

Bloomington	Livingston's
Champaign	Robeson's, Inc.
Danville	Block & Kuhl Co.
Decatur	Block & Kuhl Co.
Galesburg	Block & Kuhl Co.
Peoria	Block & Kuhl Co.
Quincy	Block & Kuhl Co.

Indiana

Indianapolis	L. S. Ayres & Co.
Muncie	Ball Stores
South Bend	Robertson Bros.

Iowa

Cedar Rapids	Smulekoff's
Des Moines	Younkers
Fairfield	Bradshaws
Sioux City	T. S. Martin Co.

Kansas

Coffeyville	Long-Bell Lbr. Co.
Liberal	Long-Bell Lbr. Co.
Pittsburg	Long-Bell Lbr. Co.
Salina	Long-Bell Lbr. Co.
Topeka	Karlan's
Wichita	Hinkel's

Michigan

Lansing	J. W. Knapp Co.

Minnesota

Albert Lea	Skinner Chamberlain
Mankato	Landkamer Bros. Co.
Minneapolis	L. S. Donaldson Co.
St. Cloud	Herberger's

Missouri

St. Louis	Stix, Baer & Fuller
Springfield	Heers, Inc.

Nebraska

Grand Island	Wolbach's
Lincoln	Gold & Company
Norfolk	Ballantyne's
Omaha	Orchard & Wilhelm

New York

Albany	W. M. Whitney & Co.
Geneva	Lauer Furniture Co.
Rochester	McCurdy's
Watertown	Household Merit

Ohio

Dayton	The Rike-Kumler Co.
Mansfield	The M. O'Neil Co.
Springfield	Wren's

Oklahoma

Clinton	Long-Bell Lbr. Co.
Enid	Long-Bell Lbr. Co.
Oklahoma City	Long-Bell Lbr. Co.
Tulsa	Long-Bell Lbr. Co.

Pennsylvania

York	Wiest's

South Dakota

Huron	Fullerton's
Sioux Falls	Johnson's, Inc.

Wisconsin

Manitowoc	Boston Store
Milwaukee	Gimbel Bros.
Oshkosh	Boston Store

4 Delicious Baker's Chocolate Treats

FOR A FAMILY OF CHOCOLATE-LOVIN' FOLKS

CHOCOLATE CREAM CHEESE FROSTING

1 package (3 ounces) cream cheese
2 tablespoons milk
2 cups sifted confectioners' sugar
2 squares Baker's Unsweetened Chocolate, melted
Dash of salt

Soften cream cheese with milk. Add sugar, 1 cup at a time, blending after each addition. Add chocolate and salt and beat until smooth. (Add more milk, if necessary, for a spreading consistency.) Makes 1¼ cups frosting, or enough to cover tops of two 8- or 9-inch layers, or top and sides of an 8 x 8 x 2-inch cake, or about 2 dozen cupcakes. Double the recipe to cover tops and sides of two 10-inch layers.

Youngsters really enjoy an after-school surprise of a warming cup of Baker's Breakfast Cocoa made with milk. Ummm . . . good . . . and good *for* them, too. Baker's is America's first cocoa. Look for it in the familiar brown-and-yellow package.

When people ask you why *your* chocolate chip cookies are so delicious, you can thank Baker's Semi-Sweet Chocolate Chips. Baker's Chips are specially processed to resist oven heat, stay firm through baking. (See recipes on back of package.)

Baker's German's Sweet Chocolate makes icebox cakes that are a delight to every woman who has ever baked. Not sweet—not bitter, this delicious chocolate has a flavor all its own . . . wonderful for eating, too. Try the recipes on the package.

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Products of General Foods

Whether you're making chocolate cake, pie, cookies, or icing—if it's real rich chocolate flavor you want—you insist on Baker's Chocolate. Baker's is rich chocolate, pure chocolate through and through. For generations, women all over America have been pleasing their families with chocolate desserts made with America's Number One cooking chocolate—Walter Baker's Premium No. 1.

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It's FORD for '50

Only Ford in the low-price field has a V-8 engine —a 100 h.p. V-8

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Yes, the 1950 Ford is 50 ways finer . . . from new heavier gauge steel frame and 13-way stronger "Lifeguard" body to new designed ceiling and seating for greater headroom. (Ford, you know, leads all low-priced cars in hip and shoulder room.) New non-sag front-seat springs and foam rubber cushion for firm buoyant comfort. New push-button door handle, with positive-acting new rotary door latches. Colorful new instrument panel and interior trimmings. Rich new long-lived upholstery fabrics. More extensive body insulation and sealing in 41 areas. But take the wheel—feel and hear the difference.

There's a Ford in your future — with a future built in!

GOOD RULES FOR
better farming

By Hadley Read

By checking his work against these 10 points, one farmer has averaged $5,000 a year more than another farmer on a similar farm in the same neighborhood.

1. **Plan a sound land-use program**
2. **Follow a good rotation of crops and arrange a handy field layout**
3. **High crop yields**
4. **A suitable kind and amount of livestock**
5. **Efficient livestock production**
6. **Carefully planned use of labor**
7. **Effective use of power and machinery**
8. **Conservative buildings and fences**
9. **Pay attention to prices of products bought and sold**
10. **Have a large enough business for good family living**

From a distance, you probably couldn't tell the difference between the two farms. They are both in a good, central Illinois community and are only about four miles apart. They are the same size—roughly half sections. The soil rating is almost exactly the same on both farms; and the farm owners are the same age.

These two farms are this much alike, yet over a 22-year period one farm has earned $110,000 more than the other. This means that through depression years, drouth years, and war years, one of these farms has consistently earned an average of $5,000 a year more than the neighboring farm down the road. After you think about that for a minute, your first question might well be, "All right, what's the catch?" And the answer is that there isn't any catch at all. The difference is in management—*good farm management on the part of the farm operator, himself.*

M. L. Mosher, farm management specialist at the University of Illinois, isn't surprised by such differences in farm income any more. He's been studying thousands of farm records for more than 30 years. And he says the most amazing fact learned from these studies is that one group of farmers does so much better than another group that the difference in earnings will pay for their farms every 15 or 20 years.

Through these years of study and observation, Mosher has developed a practical, sense-making set of rules or guideposts for good farming. There is nothing new about the points. They are based on the same principles of good farm management that have been taught for a good many years. It's a 10-point set, and every farmer in the Cornbelt has the ability to make use of it. It's set out on this page in a form that will make it handy to thumbtack to the wall above your desk or to paste in your books.

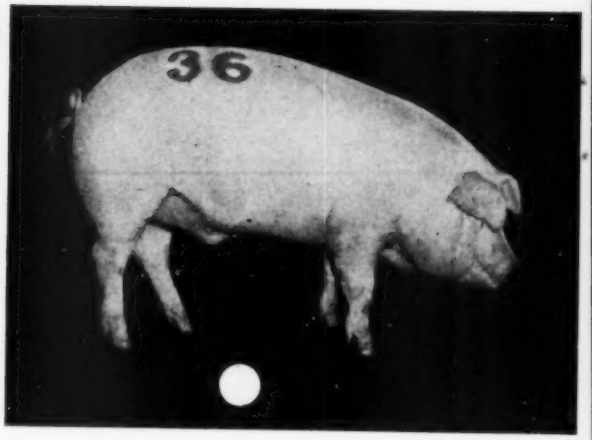
There's no secret formula in that set of rules—no mysterious, hard-to-get compounds. The end product, though, is better farming and better farm family living.

Let's take a minute to see how this 10-point set worked on the two farms we mentioned. We'll leave out the names, because they aren't needed here. And, anyway, Mosher could find you other companion farms where the differences would be just as great.

Point 1 in the set calls for a sound land-use and conservation program. Mosher emphasizes that this means putting each acre of the farm into the crop for which it is best adapted. It means soil testing and limestone, phosphates, and potash as needed. On rolling land, a good program includes erosion-control measures.

One of the keys to a sound land-use program is soil-building legumes and grasses. It is here that the difference between Farm A and Farm B starts to show. When Mosher pulled together the records for the 22 years (1925 through 1946), he found that Farm A had an average of 27 percent of the tillable land in soil-building biennial and perennial legumes and grasses. Farm B had an average of only 18 percent of the tillable land in legumes and grasses. At the same time, Farmer A used less than half of 1 percent of his tillable land for nonlegume hay and [*Turn to page 114*

Can you pick the most



If you are producing quality hogs, you should know it! Then you would have a real talking point and the right to expect the hog buyer to pay the premium you have coming. If the porkers you are raising are run-of-the-mine hogs, you should know that, too. Quality hogs can be raised just as easily as any other kind, once you know what a good hog looks like.

But many farmers don't know a good hog when they see one, and apparently the buyers don't either—if the way they buy them is any indication. There's a lot of talk about paying a premium—sometimes 25 cents a hundred—but there's much more difference in hogs than that. At the same time, remember some hogs are plain counterfeits and deserve discounts.

This was brought home to the 1,500 persons who attempted to pick the best barrows in the Carcass Class at the 1949 National Barrow Show recently held at Austin, Minnesota. This class was a special feature of the show. Where all the other classes were judged by show-ring standards, tops in the Carcass Class were judged on value per hundred pounds of live weight.

Before they were slaughtered, the 50 barrows entered in the Carcass Class were paraded before the audience, which attempted to judge them strictly on a live-value basis. A special committee of four expert hog judges did the same thing.

As you might suspect, there was considerable argument about which were the best individual barrows. That's what gave us the idea that you, too, might want to test your ability as a practical judge of porkers. So we asked the photographer to make a careful picture of each of the eight barrows which proved to be the top for its breed in the Carcass Class. Top, that is, from the standpoint of dressing out—not from the usual show-ring judging standpoint.

If you'll follow the instructions in the subheading at the right, we think you'll have fun. Of course, you're at a disadvantage in that you couldn't be there at Austin and see the live hogs.

But we feel that the pictures are more than reasonably accurate. They're all taken to the same scale. And they should help you as much as any picture possibly could, short of action and squeal. So give them a try.

After you have placed these barrows, we're betting that you'll find yourself in the same general agreement as the majority of the audience found itself at Austin—agreement that the intermediate-type hog with plenty of length, deep sides, deeper and fuller hams, and a larger proportion of its live weight in lean meat comes the nearest to providing the kind of meat which consumers demand and are willing to pay for. Lard is dirt-cheap these days, and the housewife is more choosy than she has ever been when it comes to buying a piece of pork with a little too much fat on it. Chuffy types and over-finished hogs just do not meet the market demand.

This was apparent in the Carcass Class. To determine the winning barrow, all entries were slaughtered and the individual cuts of meat from each animal were graded by a carcass committee. [*Turn to page 144*

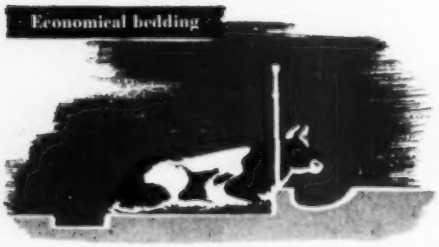
By Verlo Butz

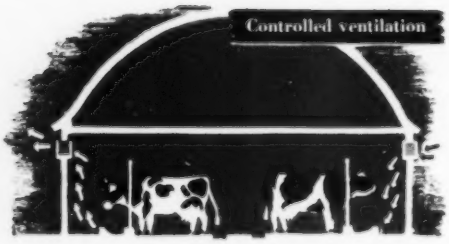
valuable hog?

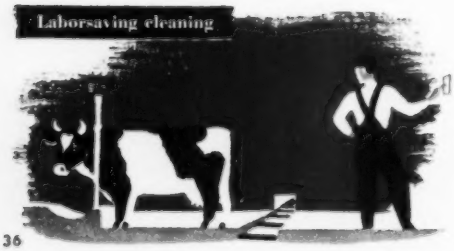
The best of these 8 barrows is worth $1.57 a hundred live weight more than the poorest. Try judging them on a strictly meat-value basis. Mark your placings in the little circles. Then turn to page 144 for official placings and how they dressed out

"YES, GIVE ME THE stanchion barn"

says W. Floyd Keepers, who bases his opinion on time-tested performance and new, laborsaving dairy equipment which is now available for this type dairy barn







The farmer or dairyman who wants to build a barn today has a choice of two types: the stall-for-every-cow barn, which is generally recognized as the conventional dairy barn, or a loose-run or pen-type system. This latter system recently has been revived and, through testing and research, improved upon. Farmers can use milking parlors with either type barn.

Manufacturers of laborsaving, sanitary steel equipment have recognized the fact that farmers do not like to be limited in their choice. So engineers have been busy perfecting new stalls and other new dairy equipment. Regardless of the choice in method of housing, it is possible to obtain equipment suitable to the needs.

Some farmers using the loose-housing system have been able to get along with very little equipment. Eventually, however, they learn that the recommendations of the University of Wisconsin for a loafing or bedded resting area, a separate feeding area with stanchions to hold the cows, a paved yard that can be cleaned daily, and a milking room or parlor are essential for success with this plan.

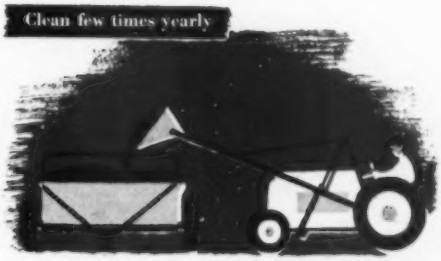
The feeding area must be cleaned daily and the bedded area twice a year at least. Loose manure should be picked up daily and placed next to the outer walls or hauled out. Additional housing is required for maternity cows, calves, young stock, and for the bull.

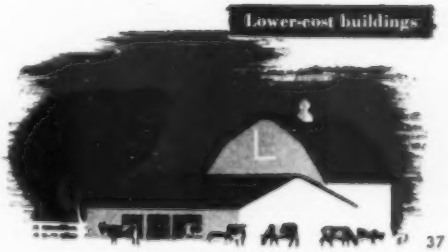
Turning cows loose in a shed is not the idea of loose housing today. Experience has shown that it is difficult to provide enough bedding to keep them clean. When about 50 percent added space requirements of this complete system are considered, the cost may exceed that of a fully equipped, stall-type barn.

Probably 98 percent of the cows in the larger dairy production areas are now housed in stall-type barns. Practical experience evidently has put the stamp of approval on this system. Of the thousands of farmers who have visited the research project at the University of Wisconsin during the past eight years, only a few have gone [*Turn to page 126*

"NO, I'LL TAKE THE loafing barn"

says Lauren H. Brown, after studying that system. He thinks it's the one way to keep good cows in the herd longer and the best way to save both time and labor





Several seasons of observation and study of dairy housing have convinced me that you can't beat the pen barn and milking parlor for handling dairy cows.

Greater laborsaving, lower building cost, and more comfort for the cows are the big advantages of this system. Then, too, pen-barn users point out that their cows stay in the herd longer and produce more and better-quality manure to help maintain soil fertility. On tenant-operated farms, the flexibility of the pen barn appeals to farm owners who may want to adapt the buildings to different kinds and amounts of livestock with different tenants.

Take the matter of labor efficiency, which means getting the necessary work done with the least time and effort. There is no doubt in my mind that pen housing takes less work than a stanchion barn. To throw a little more light on the "how" of this statement, let's examine the whole process of dairy chores and break it down into the jobs to be done:

These jobs include (1) feeding hay, (2) feeding silage, (3) feeding grain, (4) bedding, (5) cleaning manure, (6) milking, (7) cleaning and caring for milking utensils, (8) caring for the milk, (9) caring for sick and freshening cows, and (10) caring for young stock. Several of these jobs require the same amount of work and travel no matter what type barn you have. In several of the jobs, however, the pen-type barn has important advantages, if you will adopt good working methods and take advantage of certain worksaving principles.

It's easier to let the cows come to the feed than it is to deliver the feed to each individual cow. Racks located convenient to the hay storage—such as directly under the haymow in a basement barn—save much pitchfork work. The experience of pen-barn users indicates that there is no need of filling good-sized racks more than once a day.

Wells Hough, Lapeer County, Michigan, found that, by building his feed racks up the sides of his mow, filling only once in four or five days would take care of his herd. Some farmers favor outdoor feeding of hay and silage. W. D. Byrum, Ingham County, Michigan, built [*Turn to page 138*

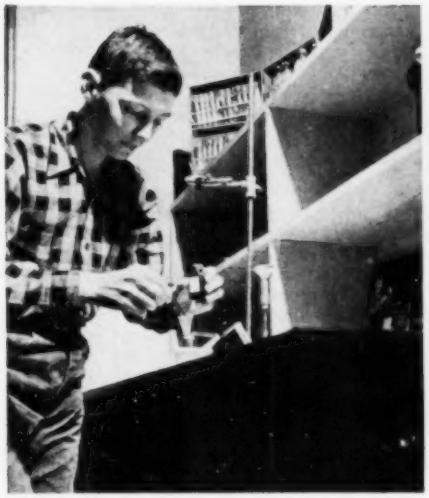
Our new house is wonderful!

We say it over and over—to ourselves and to friends who visit us. For the first time, we have room to spread out, to really enjoy life

By Mrs. Walter C. Peiree

Here are the six of us: Our youngest, Eileen, 3, is sitting beside me in foreground at left. Clinton, our studious 13-year-old, is leaning on the fireplace mantel. Walter is finding a bit of competition throwing ringers with little Stevie; from the sofa, Ken, 11, keeps an eye on proceedings

Here's our house as it looks from the driveway. It's low and rambling—as a house should be in wind-swept Kansas. The kitchen, dining room, and workroom all face the farmyard. The floor plan of our house is at left



The darkroom, actually one end of the furnace room, was planned for Walter's photography hobby, but Clinton finds it an excellent place to experiment with his chemistry set

Movies of the family, as we started to church, gave Walter a good chance to practice his favorite hobby—home movies. Our big smiles came naturally that day, for this was the first Sunday in our new house and we had never been so happy

I wish I could sing and shout as the children do when they're happy and excited. Maybe then I could get across some of the joy and pleasure we've found in our new house! It's so wonderful to be able to really spread out and live, after so many years in four rooms.

Now, Walter has a quiet office to call his own; the children have a wearproof hobby room; I have a big living room where I can really entertain for the first time in my life. There's ever so much storage space and enough bedrooms for everyone. Words can't describe our feelings for our new home.

You see, when Walter and I were married 17 years ago, Mother and Dad Peirce were living alone in the big, two-story house Dad Peirce had built 40 years before on their farm near Hutchinson, Kansas. The old house was much too big for them, so Walter and I made the second floor into a four-room apartment for us. The arrangement was ideal—until our family started growing. Then the rooms seemed to become increasingly smaller. By 1945 there were six of us, and we were positively bursting the seams—and not liking it much.

There was no question about the need for a new house, but building material scarcities made it impossible to build the house we really wanted. Rather than compromise, we decided to wait until all our plans could become a reality. That meant four more years struggling along in the old house. But we know now the wait was worth it!

Our family is learning to live all over again. The children pause at their own bedroom doors and shyly look in—then wide grins break out over their faces as they dash in to bounce on the beds, shouting, "This is mine! All mine!" Such pride they have that, from the largest to the smallest, they all make their own beds—without my asking them. I even find my housework takes a minor part of the day now, for there are time-savers like the automatic dishwasher and clothes dryer.

Our moving into the house was the best homecoming a family ever had. It was like clasping hands with a much-needed friend—for whom we'd waited long.

More on next page

Our new house is wonderful! (From page 39)

It means more fun!

Stevie was the first to have a "Happy Birthday" in our new home. With the big, new dining room we have plenty of room for family celebrations like this, as well as big dinner parties for friends and relatives. You'll notice we had the lower part of the walls painted a dark green, so it wouldn't show the smaller children's fingermarks quite so easily

Dishwashing time is a sort of game with us, thanks to family cooperation and an electric dishwasher. We make it a joint project by letting everyone carry his own dishes into the kitchen; then I do actual loading of the machine. It takes so little time this way

Naturally, many long hours and much hard work went into planning and decorating our house before we actually moved in. Our eagerness to get in was like that of a 4-H'er waiting to learn who won the blue ribbon at the country fair. I had the draperies, bedspreads, and curtains made weeks in advance. I even had them all pressed; for days on end I moved them fondly from one flat surface to another in our little four-room apartment to prevent their getting mussed.

Most of our color schemes developed from fabric prints, for I felt designers of good fabrics knew what colors to use together. It was easy to pick a practical and appropriate drapery or bedspread fabric for each room, then color-scheme everything else around it. I was even able to find blankets in just the right colors to blend with each of the bedroom schemes.

Green is the family's favorite color, so I tried to use some shade of it in every room to tie the whole house together. It was easy and fun to "fabric-plan" colors this way.

Furniture selections were a little more difficult, for I had a few old American Empire pieces Mother Peirce and my family had given me. I wasn't sure just how to use them, because our house was to be quite modern. We finally solved this problem by furnishing all the rooms with modern furniture, except the master bedroom and the living room. The living room is done in conservative Modern and Eighteenth Century furniture to blend with the old antiques; the bedroom is keyed to an old chair and Empire chest by the drapery treatment and the full, beruffled bedspread.

By now, you must know how much we like our new house. Why shouldn't we? It's big, it's new, it's ours, and it lets us live spaciously and graciously as we believe we should.

Clinton has Ken stumped in this checker game, and is he loving it! The boys like to use their bedrooms as their own private "hangouts"—for men only—for chats and games

Above is our living room. We love the corner fireplace with the sectional in front, for it provides an ideal gathering spot for the family. On the wall behind, not shown, we have our radio-phonograph and piano

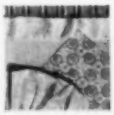
Below is the most-used room in our house, the hobby room. One whole wall is devoted to storage space for toys, games, tables, chairs. The worktable is for hobbies, studying, family movies. *More on next page*

Our new house is wonderful.... From page 41

More privacy for all!

Clinton wanted a room for studying, reading, playing, as well as sleeping. He wanted it to look like a boy's room rather than a bedroom. Red is his favorite color, so we selected it for spreads and draperies in washable corduroy. For easy floor cleaning, we chose linoleum. Color scheme came from the chair covering

I planned the master bedroom, below, around the colors found in the chintz drapery fabric. In the little square on the right you can see how I picked up the turquoise, gray, and yellow from this print and used them in the other fabrics. I was even able to find blankets in the right yellow to blend with the print



Eileen's room will double as a guest room, so it was done in hard-to-soil, wrinkle-resistant chintzes. The butterfly theme and all the colors came from the black chintz fabric, as you can see from the samples shown at the left. I was able to find lush pink blankets to match the room colors, so Eileen is really "in the pink" now!

It means less work!

A sewing corner is something I've always wanted, so I had one "tailor-made" at one end of the office. Now I can keep everything I need for sewing in one spot. The cutting board Eileen is standing on is hinged to one wall, so it can be pushed up out of the way when not in use. On the left and behind me are storage cabinets and hanging space for unfinished garments. Two-tier curtains make it possible to control sun and light

Walter's office, opposite my sewing corner, gives him plenty of room to work in peace. We had his desk built to order with file drawers, bookshelves, and supply cabinets to fit his particular needs. Keeping the accounts end of his farm business straight is much simpler now that he has a place to do it

The workroom is my pride and joy; it's a dream of efficiency. The automatic washer and dryer make laundry day a snap. Pull-out shelves at sit-down height take the strain out of clothes sorting, vegetable preparation, and indoor gardening. The sink and counter, right, are put to good use when I'm canning, cleaning chickens, arranging flowers, sprinkling clothes

More on page 130

Why can't you get a

A good legume crop makes you more money than anything else you grow. But lack of care in the seeding often robs you of a stand. Here is how to make sure you get a stand *every* year

By C. J. Willard
Ohio State University

We're pretty careful about how we plant our corn. But most of us haven't greatly changed our method of sowing sod crops—the most vital part of our farming system—from the way it was done 2,000 years ago. Only with our sod crops is a poor or lost stand a yearly hazard, even to better farmers.

But the sod crops are the only truly soil-conserving crops we grow. And they are our cheapest, most important livestock feed. There are many reasons for failure; the man who gets a good, even stand of clover, alfalfa, bromegrass, or mixtures of them, must do many things right:

DO make sure your soil is sweet. Many failures of forage seedings still come from soils so acid the seedlings can't survive. This is an old, old, story, but it seems to need retelling. There are still millions of acres that need lime for really good seedings. Are yours, by any chance, among them?

DON'T allow starvation to ruin your forage seeding. It often does. Put plenty of phosphate within an inch of the seed or directly under it. That's the most important single element for legumes in the Cornbelt. Along the Eastern seaboard, potash is often lacking. Phosphate especially encourages root development, and putting fertilizer with or under the seed has been profitable even on soils which show no response to fertilizers in any other way. How much more, then, will phosphate pay on soils on which phosphorus is the element which limits crop production, as on a majority of acres in the Cornbelt?

DO a careful sowing job. Unfortunately, few machines for sowing fertilizer with forage seeds have been well developed. The fertilizer attachment on the grain drill would be excellent, if there were also a sure way to prevent the forage seeds from being placed too deep.

Ideally, fertilizer should be placed deeper than the seed. For the present, the most practical plan is to broadcast as nearly as possible on top of the fertilizer band, but in most seedings this isn't very easy. When sowing in small grain, the fertilizer band is occupied by the grain. You can use every other shoe of the drill for grain, and the alternate openings for forage. This gives a band of fertilized forage, without competition, every 14 or 16 inches. But this is not as close as is usually desirable. These wide rows are good for forage seedings in dry climates or seasons. In favorable climates or seasons, they make little difference.

DON'T let a "nurse" crop smother the seeding. Most meadow and pasture seedings are made in companion crops of oats, wheat, or barley. "Nurse" crops, they are often called. They have

good legume stand?

been called that so often, many people think they are a help to the forage seeding. But, for the most part, they are not. We sow in small grain because, if we are successful, we get a return from the land during the year of seeding. Furthermore, experience shows that if we don't sow small grain, we will get a "nurse crop" of weeds which will do more harm than the grain and be worth nothing. Grain matures in midsummer, leaving the field to the forages; few weeds do!

DO decide which grain makes the best companion crop. Any spring grain is better for alfalfa than any winter grain. Red clover, which endures shading better than alfalfa, and drouth not as well, may do better in winter wheat. This matures early, and offers less summer competition for moisture than oats. Winter barley, with its dense, vigorous, early growth, is almost hopeless as a companion crop on fair to good land, unless it is pastured or clipped early. Spring barley, because of its short growth and early maturity, is more favorable than spring oats.

When we sow in winter wheat or other winter grain, a major hazard is that the grain is already there, and growing so fast that the forage often does not have a chance. To meet this, we should sow clover as early as possible, so that the grain is as small as possible when the forage starts. Then, however, we run a chance of having the seedlings killed by freezing, so we'll have to try for a happy medium.

DON'T let frost ruin the seeding. Clover and other seedlings are most easily killed by frost just as the root breaks through. At this stage a temperature of 26° will kill the seeds. Before the seed coat breaks, and after the seedling has true leaves, it is much less easily killed.

Here, the plants of wheat or other winter grain really protect the seedlings. There is a surprising difference in the temperature of soil under wheat and in the open—a difference which saves a lot of clover and alfalfa in March! There seems to be no difference between adapted alfalfa and clover in the ease with which they are killed by early freezes. In years of comparative tests, alfalfa has done best sown as early as clover.

DO make a split seeding. As the most favorable date varies with the season, a good plan is to sow half the seed early, the other half two to three weeks later—perhaps drilling in this last seeding. This "split seeding" takes more labor, but is good insurance.

When is "early"? In general, it is when the frost is out of the ground, but the surface still freezes more or less at night. Along parallel 40 degrees—the latitude of the Kansas-Nebraska line; Springfield, Illinois; and Columbus, Ohio—"early" will be about March 10. The traditional "honeycombed ground" of this period does not develop on all soil types, but is an aid in covering seed where it does develop. More important, however, is the fact that the surface does not dry out at this season. So seeds can then germinate even on the surface, without being killed by drying.

DON'T broadcast if you can drill. On any day you can get a drill in the field, clover or other forage drilled that day will give a better stand than seed broadcast that day. Even the smallest seeds need *some* cover.

Fertilizer can be sown with the seed when it is drilled, and it's a big help in getting a stand. But we can't always get in the field early with a drill, and clover broadcast early is often better than that drilled later. Too, by broadcasting early, the job is out of the way, so good weather can be used for other pressing jobs.

DO use a mixture. It's one good insurance of having something for cow feed out of a seeding. Alfalfa starts best in a dry season. Red, alsike, and Ladino clovers start best in a wet season. We do not know what the weather will be after seeding this spring, but if we sow both alfalfa and clover, we are more certain to have some legume present than if we sow either one alone.

There are also advantages to some grass mixtures. However, mixtures should be made up to fit definitely known needs, not be a "shotgun" mixture of everything in the seed catalog.

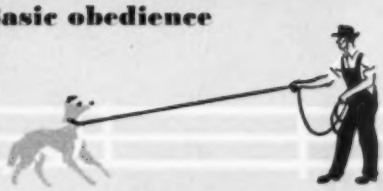
DON'T neglect a manure top-dressing, if you can provide it. One of the best helps to a stand in winter grain is to top-dress it with 3 or 4 tons per acre of strawy manure any time before the forages are sown, but as early as you can. This mulch helps protect the seedlings against freezing, first, and against drying. It has often made the difference between good and poor stands. So important is this that, where winter wheat is used as a companion crop, a light top-dressing on the wheat with the strawiest manure available is worth more than putting the manure on land to go into corn.

DO make sure the seeding isn't shaded out. Often, winter grain gets to "growing like a house afire" in April. Forage seedlings in it, alfalfa especially, are killed by lack of sunlight. The most practical remedy, if the crop is to be left for grain, is pasturing until just before the jointing stage. Sometimes, the grain may be harvested entirely by pasturing—always with benefit to the seeding.

We have yet to hear of a seeding damaged by pasturing, either winter or spring grain—but thousands of seedings have been killed by too much grain.

If you can't pasture, perhaps you [*Turn to page* **110**

Basic obedience

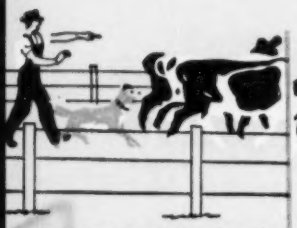


Come here. Put on leash about 20 feet long; let the dog go off to leash length. Command "Come here." Repeat this order while pulling dog toward you. Reward immediately

Heel. Dog is at left side. Order "Heel." Restrain with leash, encourage with liver

Down. Command "Down." Tap ground with left hand, while right presses dog down

Stay. Dog lying down. Order "Stay"; go backward facing dog. Recall, reward



Driving herd. In a fenced lane. Order "Drive on." Start stock. Encourage dog to follow

Circling herd. Cows near fence. Order "Around"; point in desired direction. Start circling with dog

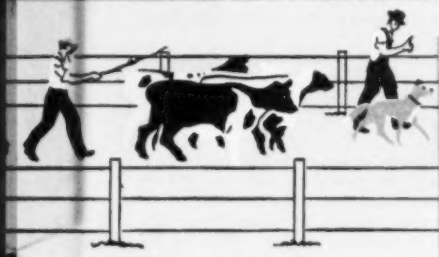
If he understands, walk few steps with him, then through diameter of circle behind stock. Await dog

Stray animals. Post yourself near flock. Point toward stray; command "This way"

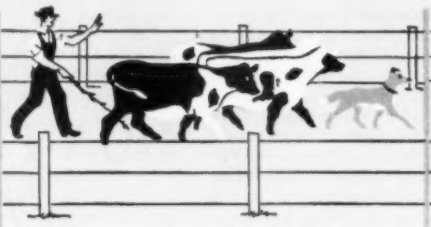
Driving herd toward master. Walk toward herd closely enough for dog to see the animals. Stand facing the herd and order dog "Down." Give him a chance to look the animals over

Order dog to circle herd by giving a proper voice command and distinctive hand signal. Watch your dog's progress toward the herd

When dog has reached such a spot that herd is between you and dog, order "Down"



Leading herd. Cattle in a fenced lane. Walk with dog ahead of herd, helper driving the stock. While walking ahead, repeat command "Lead"



As soon as your dog understands the command "Lead," release helper and place yourself at the rear of herd. Urge dog on by commanding "Lead"

Crossroad control. Stay with dog at crossroad; helper drives herd by. To return straying cow,

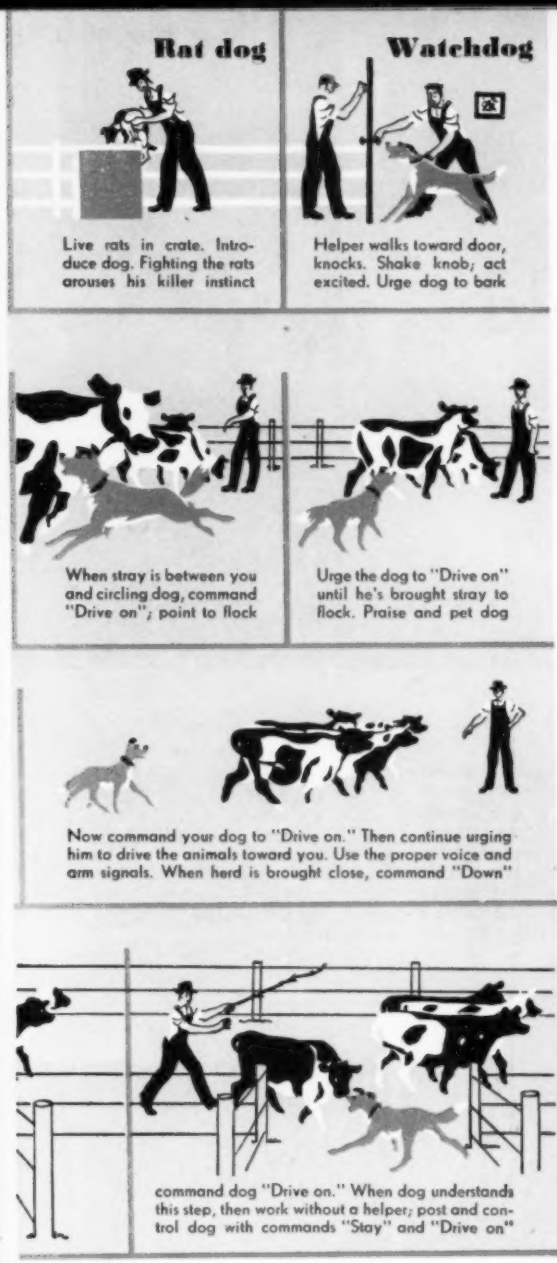
How to train your farm dog

By Frank Mathews

Anybody who likes animals can train a dog. No special knowledge is needed. You farmers with your inborn "knack" of handling animals sometimes get better results than professional trainers. That brings us right to the first principle—*you* can train *your* dog better than any trainer.

You see, each master-and-dog "team" have their own way of understanding each other. It might be different with each team. So, if your dog was trained by someone else, he will work fine for that person, but the dog you yourself have trained will work for you.

Necessary tools. The most important tools in dog training are the commands, rewards, and



punishments which must be applied repeatedly. Add natural liking for your dog and you have the best recipe for how to train a dog. Now, let me explain how to apply my recipe:

The commands must always be given in a strong and determined voice and always the same command for a certain task. It would confuse Rex to be told one day to "lie down," the next day to "wait here." Once a command has been agreed upon for a certain task, always use it exactly the same way. For herd-dog training, the verbal commands can be supplemented by visual orders or motions.

Rewards and punishments are most effective when they follow instantly. If your dog has done something well, quickly [*Turn to page 122*

How to plan a good-eating garden

By Myrtel J. Cunningham

We editors met Mrs. Cunningham and saw her garden. She has the reputation of being one of the best gardeners in Kansas. From her garden she is able to feed her family without wasting soil, time, steps, energy, or food

To me, gardening is fun, but that's not all! It's also a profitable part of our farm business. At our place, the garden is included in the yard of our home, with a shelterbelt on the north, west, and south to protect it from the wind. It is about 60x100 feet.

We plant the corn, potatoes, and the tomatoes for canning in a sheltered spot in the river bottom so there is no need to irrigate these long-season crops. But all the other vegetables are grown in the yard plot because we find it easier to have a wide variety of vegetables in the daily diet when the garden is close to the kitchen.

Ours is a *we* garden, not a *she* garden that consists of a few seeds promiscuously planted in the spare time of a busy wife and mother. The men in our family make the first effort toward our getting a good-eating garden.

We take care of soil fertility by an annual application of well-rotted barn manure, and I believe this is a good practice for any farm gardener. Occasionally we also put on a 45-percent phosphate application, as well as ashes from wood stoves and fireplaces for calcium and minerals.

During the winter months, while our garden is absorbing the accumulated moisture, we women in the family make our first contribution by preparing a food budget to meet the family's needs. Our needs consist of two vegetables, besides tomatoes, to be served every day of the year.

Mrs. Cunningham planning

We divide our annual food requirements into two time divisions: (1) June 1 to October 1, when most of the food is used fresh from the garden, and (2) October 1 to June 1, when most of the food must come from our processed and stored supplies.

By counting the weeks of this second period, we find there are 32, and we figure on that basis. As an example: Our family is especially fond of peas, so we plan [*Turn to page 106*

Why you should have a *dryer*

- *It saves work*
- *It saves time*
- *It saves steps*
- *It saves tempers*
- *It saves you*

By Margaret Hegerfeld

As one of the farm-born-and-reared variety, I used to hang out 14 to 20 machinefuls of laundry every week (I fully believed we were the cleanest family in the world!). I am among the many who have suffered the ordeal of getting clothes on the line in Dakota's sub-zero weather. (The clothes and I usually were equally stiff by the time I mastered the job.)

I know the embarrassment of having Dad's long underwear slap a guest in the face as she entered the living room . . . I've been "madder 'n blue blazes" when the furnace let out a black belch on just-hung wet sheets . . . and I got the reputation for being the fastest runner in Parnell Township 'cause I usually beat the rain and dust storms to the clothesline.

Therefore, I know whereof I speak when I say every homemaker should

Work clothes—shirts, overalls, heavy jackets—dry beautifully. Note how smooth and neat the shirt and overall are in the pictures below. They weren't touched with an iron—merely taken from the dryer a wee bit damp and folded while still warm. Among the good things we can say about automatic dryers is: They end lifting and toting of heavy loads of wet clothes, save steps.

From washer to dryer in seconds

Few steps, no hanging, no ironing

Rain or shine —a dry wash, fluffy and sweet

It dries your clothes when it's sunny, raining, snowing, sleeting, or just blowing up a good ol' dust storm—it's like an angel in the house. With an automatic dryer, clothes drying is the easiest 1-2-3 process you'll ever see. (1) Put wet clothes in; (2) take clothes out—dry, sweet-smelling, and fluffy; (3) fold, right from dryer, bath towels, kitchen towels, diapers, underwear, sheets—no ironing. Like a good washday breeze, it eliminates ironing of corduroys, flannels, jerseys, many tots' things.

have a good automatic clothes dryer.

Just to make sure I wasn't "peculiar" about this whole thing, I made a point of talking with farm women—and city women—who have dryers. They echoed my every sentiment. Wrapping it up in a neat little package, they said, "It's the most wonderful piece of equipment I have."

Therefore, it became my duty to find out *why* they felt that way. It boiled down to this: Dryers beat the weatherman at his game; they save hours of clothes hanging; they eliminate carrying heavy loads of clothes and thus save both steps and energy; they practically eliminate sprinkling; and they cut down ironing time.

Most women told me they more or less expected the benefits I have listed, but their greatest, unexpected pleasure was in finding how soft, fluffy, and sweet-smelling their machine-dried clothes were. The wonderful smell of clothes dried on sunny days outdoors hasn't been duplicated, but dryers come pleasantly close to it.

You'll, of course, be as interested as I was in learning where the time was saved—and how much. Some of the women said their dryers saved as much as three hours every week. That is a saving of 20 eight-hour days a year. The time saved each week amounts to an hour saved hanging clothes; ½ hour saved sprinkling clothes because they come from the dryer just right for ironing; and 1½ hours saved in ironing time, for most items come from the dryer smooth and ready to fold.

Saving in work and energy is in the dryer's favor, too. [*Turn to page 69*

Dryer to ironer eliminates sprinkling, cuts ironing time, for there are no folded- or rolled-in wrinkles. To iron right from dryer, dry the clothes to dampness you want for ironing

Quilts and mattress pads take on a "newness" when dried in an automatic dryer—the tumbling fluffs the padding. Dryers prevent stretching of fabrics caused by hanging

Bedspreads, chenilles, crinkle-finish fabrics like seersuckers, come out of dryer ever so fluffy and sweet-smelling with no ironing needed—a delight to any busy homemaker

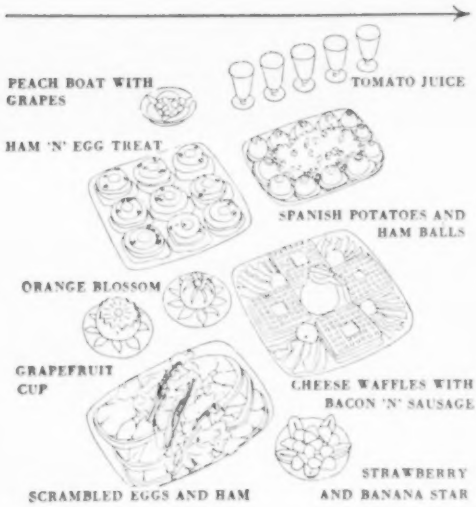
Rugs, braided or tufted, are particularly fine when taken from the dryer. No wear and tear from clothespins and violent winds means longer-lasting clothes and furnishings

Hearty breakfast and supper dishes

When your family gets up to the smell of coffee in the making and bacon frying, when the sweet, nutty aroma of waffles baking greets them, it's indeed a "Good morning."

Recalling the terrific appetites we had down on the farm and those we still encounter (and develop) when we go back, we suggest you try the dishes on the opposite page. They are wonderful for breakfast or supper.

We like them particularly because they are so attractive, yet fairly simple to make, and oh, so-o good! We don't suggest you make Orange Blossoms every day, but as a Sunday special they're pretty and fun. The Ham 'n' Eggs aren't so different, but a little variance in the egg recipe and a touch of tomato give them new appeal. If your man is the potatoes-for-breakfast type, he'll like the Spanish Potatoes for his morning meal. Waffles are delicious any time; we think you'll enjoy them most if you whip them up, then let Dad or the children oversee the baking at the table.



By Tasting-Test Kitchen Staff

Egg 'n' Ham Treat

Serves 9

Poach . . . . **9 eggs** to soft stage (about 8 minutes)
Melt . . . . **6 tablespoons butter**
Blend in . **6 tablespoons flour**
Add . . . . **3 cups milk**
Stir until mixture is smooth and thickened.
Add . . . . . **¾ cup finely chopped ham**
¾ teaspoon salt
¼ teaspoon pepper
Toast . . . . **9 halves** of **hamburger buns**
Spread toasted buns with **butter**
Arrange buns on **slices** of **fried Canadian bacon**
Place eggs on toasted buns.
Pour some of ham mixture over each egg.
Serve immediately.

Cheese Waffles

Makes 3 9-inch-square waffles

Beat . . . . **2 egg yolks** until light, foamy
Blend in **1¼ cups milk**
6 tablespoons melted butter
Sift together:
2 cups sifted cake flour
2 teaspoons baking powder
¼ teaspoon salt
Add dry ingredients to egg mixture.
Beat until smooth and creamy.
Beat . . . . **2 egg whites** until stiff
Fold egg whites into batter along with **1 cup grated cheese**
Bake in hot waffle baker until steam ceases.
Top with butter and syrup.
Serve with **fried sausage** and **bacon.**

—*Mrs. E. Cuck, Nebraska*

Ham Balls

Serves 8

Mix together thoroughly:
1 pound ground smoked ham
½ pound ground lean pork
1 egg, slightly beaten
¼ teaspoon ground cloves
1 tablespoon brown sugar
¾ cup heavy cream
¾ cup bran flakes
Shape into small balls; place in shallow baking pan.
Bake at 375° about 30 minutes.
Place . . . . **12 canned peach halves** in another pan; heat last 10 minutes meat is baking.
Place a ham ball on each peach half.
Serve with **Spanish Potatoes.**

Grapefruit Cup

Slice . . . . **grapefruit** in half
Loosen segments.
Scallop rind top with sharp knife.
Garnish with **maraschino cherries,** and **mint leaves** if desired.

Strawberry and Banana Star

Slice bananas in half lengthwise, then in half crosswise
Arrange bananas to form star points.
Top with **½ cup strawberries**
Serve with **cream.**

Peach Boat With Grapes

Place . . . . **3 peach halves** in each saucedish
Add . . . . . **3 chilled grapes** to each peach center
Garnish with **mint leaves** if desired.

[*Turn to page 59*

"Take a color from 1 to 10"...

Morning Blue
2
★Dusk Blue
Sunny Yellow
4
Terra Cotta
5
Mist Gray
6
Shell Pink
7
Sea Green
8
★Pine Green
9
★Bright Red
White

for your kitchen by

St. Charles

● Color is coming into your kitchen, as surely as two and two are four. The warmth and hospitality of color have too long been lacking in the one room that is, so truly, the heart of your home.

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★Recommended for interiors or other accents.

An estimate from your St. Charles dealer will convince you that large or small, plain or fancy, your kitchen can have St. Charles color, convenience and quality.

St. Charles

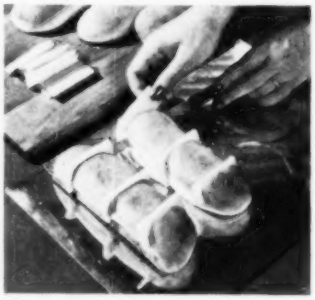
THE *QUALITY* NAME IN KITCHENS

. . . custom built of steel

Tips for the cook

Ideas that spark up your meals and make food preparation easier

● For surprise burgers, sandwich a slice of onion between 2 well-seasoned, thin hamburger patties. Pinch edges together. Fry slowly or broil until done. Serve on buns



● Cheese buns are delicious alone or with soup. Make three diagonal cuts in each bun. Spread with butter and insert nippy cheese slices. Place under broiler to melt cheese

● An easy way to make tart shells. Cut pastry in rounds to fit muffin cups. Place over back of each cup. Flute to fit. Prick with fork. Bake in hot oven 8 to 10 minutes

● Orange juice in half the time! The trick is to squeeze small oranges by cutting off stem end only and extracting juice of whole fruit in one operation. Good for lemons, too

● Combine odds and ends of fruit juices—pineapple and orange are tops—that clutter your refrigerator. Stew prunes or apricots in the juices. The results are most delicious

● Salty soup is no cause for alarm. Add a sliced raw potato (2 if there's a large amount of soup) and simmer slowly 5 to 10 minutes. Remove potato slices before serving soup

● Apples bake without cracking, will keep every bit of flavor, if you remember to peel a 1-inch band from the middle of each apple. Stuff; bake in a moderate oven. END

Try PAN-FRIED BANANAS

4 firm bananas* **¼ cup melted butter or margarine** **Salt**

**Use all-yellow or slightly green-tipped bananas.*

Peel bananas. Keep whole or cut crosswise into halves. Fry bananas slowly in butter or margarine until tender . . . easily pierced with a fork . . . turning them to brown evenly. Sprinkle lightly with salt. Serve hot as a vegetable. Four servings.

Pan-Fried or Broiled Bananas served as a vegetable are excellent partners with fish in flavor, texture and food value.

Pan-Fried Bananas with hamburg patties and whole carrots make an appetizing, colorful plate combination.

CHIQUITA BANANA SAYS: GET

FREE COOKBOOKS

FOR TRYING THE ABOVE RECIPE

Will you try our recipe for Pan-Fried Bananas and then fill out the coupon below, telling us how you like it? In appreciation for your help, we will send you Chiquita's 52-page cookbook, "BANANAS . . . how to serve them," and "BANANA Salad Bazaar." Please try this recipe today and send us your comments.

FILL OUT AND MAIL

UNITED FRUIT COMPANY, Box 92, New York 46, N. Y.

I served PAN-FRIED BANANAS to _____ (number of folks)

on _____ (date). Their comments were _____

NAME _____

ADDRESS _____ CITY _____ ZONE _____

STATE _____ Only one coupon to a family. Offer expires March 15, 1950

SF 2-50

Elegant, it's true... but Simple, too!

GLORIOUS PEACH MERINGUE CAKE— MADE THE NEW PILLSBURY WAY

NO CREAMING SHORTENING · NO FROSTING NEEDED

QUICK-MIX METHOD

developed exclusively for

Pillsbury's BEST

Whenever we develop a new kind of baking for you, we make sure we're saving you all the time and effort we can.

That's why we developed our Quick-Mix method for making cakes.

You make beautiful cake . . . like this delicate Peach Meringue Cake, for instance. And you do it so very easily. No creaming of shortening. No frosting needed! You simply spread meringue over cake batter, and bake them together.

Of course, this is only one of the many ways you can use our Pillsbury's Best Flour. This all-purpose flour is wonderful for pies, cookies, bread, rolls . . . everything you bake.

Try this recipe soon, it's really easy!

Ann Pillsbury

Director, Pillsbury Home Service Center

Ann Pillsbury's QUICK-MIX PEACH MERINGUE CAKE

BAKE at 325° F. for 50 minutes. MAKES 9x9x2-inch cake.
All ingredients must be at room temperature.

MERINGUE (*Prepare before mixing cake.*)

Beat..... 3 **egg whites** and ⅛ teaspoon **salt** with rotary beater until foamy.*

Add..... ½ teaspoon **cream of tartar** and beat until stiff and dry.

Beat in.... ¾ cup **sugar**, 2 tablespoons at a time, until mixture stands in *very stiff* peaks. Last half of sugar may be folded in.

Add..... 1 teaspoon **vanilla.**

CAKE (*Measure ingredients before making meringue.*)

Sift together 1 cup sifted **Pillsbury's Best Enriched Flour**
1½ teaspoons double-acting **baking powder**
½ teaspoon **salt**
½ cup **sugar**

Add..... 3 **egg yolks,** unbeaten
½ cup **top milk**
¼ cup **shortening**
1 teaspoon **vanilla**

Beat..... for 2 minutes, 300 strokes, until batter is well-blended.

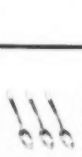
Pour..... into 9x9x2-inch pan, greased and lined with waxed paper that extends 1 inch beyond rim of pan.

Spread..... meringue over batter. With back of spoon shape "cups" in meringue to hold peach halves.

Bake..... in slow oven (325° F.) for 50 minutes. Remove from pan and cool.

Place..... California Cling **peach halves** (No. 2½ can size) in "cups." Top with whipped cream and serve.

*Meringue may be mixed with electric mixer. Use large mixer bowl; beat at high speed until mixture is *very stiff*. To mix cake, use small mixer bowl and beat at low to medium speed for 2 minutes.



3 Original Rogers Silverplated Teaspoons. Exclusive Lady Ann pattern—only 50¢ and 6 coupon values. Send to Pillsbury, Dept. S, Box 150, Minneapolis, Minn. Write for free premium booklet on Pillsbury Premium Plan. Savings up to 50% on complete silverware service and other valuable articles. Extra-Value coupons with all Pillsbury packages and sacks, including Pillsbury's Best Feeds.

Ham Waffles
Makes 8 round waffles

Sift.....**2 cups sifted flour**
2 teaspoons baking powder
½ teaspoon salt
Combine **3 egg yolks,** well beaten
1¼ cups milk
Add liquids to dry ingredients.
Beat just until smooth.
Stir in.....**1 cup finely chopped ham**
6 tablespoons melted butter
Fold in.....**3 egg whites,** stiffly beaten
Bake in hot iron till steam disappears.
—Mrs. Amelia Wink, Wisconsin

Spicy Dessert Waffles
Makes 4 9-inch squares

Cream....**1 cup butter**
2 cups brown sugar
Stir in.....**2 eggs,** well beaten
Sift together:
3 cups sifted flour
4 teaspoons baking powder
1 teaspoon salt
2 teaspoons cinnamon
2 teaspoons allspice
1 teaspoon cloves
Add dry ingredients alternately to egg mixture with
1 cup milk
Stir in.....**1 cup chopped nuts**
Bake in hot iron till steam disappears.
Serve with **sweetened whipped cream.**
—Mrs. Ewald Johnson, Wisconsin

Chocolate-Pecan Waffles
Makes 4 9-inch squares

Sift.....**3½ cups sifted flour**
¾ cup sugar
2 tablespoons baking powder
1 teaspoon salt
Add.....**2 cups milk**
4 eggs, well beaten
4 1-ounce squares unsweetened chocolate, melted
¼ cup melted butter
Mix well.
Stir in.....**1 cup chopped pecans**
Bake in hot iron till steam disappears.
Top each section with
1 tablespoon sweetened whipped cream
4 banana slices
—Mrs. T. Downey, Iowa

Delicious cheese dishes

These very tasty recipes suggest new ways to brighten up Lenten meals

Macaroni Club Casserole
Serves 6

Cook.....**2 cups elbow macaroni** in **boiling salted water** for 5 minutes
Drain and turn into greased, 5½x11-inch loaf pan.
Pour.....**1½ cups milk,** scalded, over
1 cup dry bread crumbs
Stir in.....**1½ cups grated American cheese**
¼ cup melted butter
3 eggs, well beaten
3 tablespoons chopped pimiento
1 tablespoon chopped parsley
1 tablespoon chopped onion
1 teaspoon salt
⅛ teaspoon pepper
Pour over macaroni; bake at 325° (moderately low) 1 hour.
Serve with **mushroom sauce.**
—Mrs. Sylvin Ehalt, Minnesota

Cheese Fondue
Serves 6

Combine **1 cup milk,** scalded
1 cup dry bread crumbs
1 cup grated American cheese
1 tablespoon butter
½ teaspoon salt
3 egg yolks, well beaten
Fold in.....**3 egg whites,** stiffly beaten
Pour into greased, 1½-quart casserole.
Bake at 325° (moderately low) 40 to 45 minutes.
—Mrs. Ralph Thompson, Nebraska

Cheese Dumplings in Tomato Sauce
Serves 6

Mix together lightly:
2 cups prepared biscuit mix
1 cup grated American cheese
1 tablespoon grated onion
Stir in . . . **¾ cup milk**
Drop dough from spoon into
4 cups boiling tomato soup seasoned to taste with
salt and **pepper**
Cover and cook 25 minutes over low heat.
Do not lift cover during first 20 minutes of cooking period.
—*Miss Lorene Hearing, Missouri*

Deviled Welsh Rabbit
Serves 6

Make white sauce with
1½ tablespoons butter
1½ tablespoons flour
1½ cups milk
Stir in . . . **2¼-ounce can deviled ham**
Add . . . . **½ pound nippy spreading cheese,** cubed
Stir over low heat until cheese melts.
Mix in . . . **½ teaspoon Worcestershire sauce**
½ teaspoon dry mustard
½ teaspoon salt
⅛ teaspoon paprika
⅛ teaspoon white pepper.
Serve hot on toast or crisp saltines.
—*Mrs. C. A. Tarney, Pennsylvania*

Cheese Delights
Makes 12 pieces

Cut into 12 1x2x½-inch pieces
12 ounces Cheddar cheese
Soak cheese 2 hours in
1½ cups warm milk
Dip cheese in the following ingredients in order listed:
¾ cup flour
2 eggs, well beaten
1 cup dry bread crumbs seasoned with
¾ teaspoon salt
⅛ teaspoon pepper
Fry in deep fat at 350° until brown.
Serve with salad.
—*Mrs. L. V. Everly, Nebraska*

Wonderful waffles

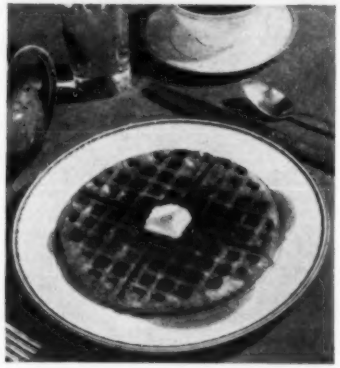
Make 'em at the table—buttery-rich for supper and breakfast, good 'n' sweet for dessert

Orange Waffle Sandwiches
Makes 4 9-inch squares

Beat . . . . . **4 eggs** until light
Beat in . . . **1 cup sugar**
⅓ cup grated orange rind
Sift . . . . . **3½ cups sifted flour**
½ teaspoon salt
5 teaspoons baking powder
Add dry ingredients alternately with
⅔ cup orange juice
2 tablespoons lemon juice
Stir in . . . **1 cup melted shortening**
Bake in hot iron till steam disappears.
Separate each waffle into sections.
Spread sections with
2 cups heavy cream, whipped and sweetened
Put together sandwich fashion.
Garnish each top with
4 orange sections
1 maraschino cherry
Serve as dessert.
—*Mrs. N. D. Smith, Iowa*

Corn-meal Waffles
Makes 10 round waffles

Sift . . . . . **2 cups sifted flour**
2 cups yellow corn meal
2 tablespoons baking powder
3 tablespoons sugar
2 teaspoons salt
Combine **4 egg yolks,** well beaten
2 cups milk
½ cup melted butter
Add liquids to dry ingredients.
Fold in . . . **4 egg whites,** stiffly beaten
Bake in hot iron till steam disappears.
Serve with **butter** and **syrup.**
—*Mrs. R. L. Prase, Nebraska*



Only Kelvinator, pioneer for 36 years, could bring you

11 to 12 cu. ft. of cold space!

in the floor space of pre-war "6's"

with giant Frozen Food Chests!

Now Kelvinator brings your farm kitchen another great advance in cold-clear-to-the-floor!

Another "first" from Kelvinator! Pioneer in automatic electric refrigeration for the home, 1914! First with cold-clear-to-the-floor, 1947! Now 1950, first with another great engineering triumph, 11 to 12 cubic foot refrigerators in the floor space of pre-war "6's"! Up to 96% more cold space, bringing you convenience never before achieved!

Enjoy better farm living with these extra-value features!

MORE ROOM FOR FROZEN FOODS! Get a giant Frozen Food Chest! Up to 80-lb. capacity. (42½-lb. in model shown.) Save trips to store and locker plant! Helps you prepare meals faster!

NEW MIRACLE OF BEAUTY! Polystyrene, new wonder material, used for many parts, adds beauty, durability. White clear through! Hard. Smooth. Won't absorb flavors.

FLEXIBILITY YOU NEED! It's easy to store a large milk can, a whole turkey, or a watermelon with Kelvinator's adjustable shelf arrangement. It's specially designed for farm use!

HERE'S *MORE* COLD SPACE! The wonderful new, *cold* Kelvinator Super Crisper. *Over a bushel capacity.* Use it for fruits, vegetables, beverages and eggs. Another Kelvinator "first."

COLD CLEAR TO THE FLOOR! A big "12" in the floor space of pre-war "6's." It's Kelvinator's Masterpiece Model VM for the finest protection of your daily foods. More cold space in less cabinet space! With giant 42½-lb. Frozen Food Chest! Adjustable shelf! Bigger-than-a-bushel *cold* Super Crisper! Refrigerated by the Polarsphere, Kelvinator's famous cold-making unit that defies time and wear! See 9 brilliant new models at your Kelvinator dealer's. Visit him!

FREE! *Beautiful Folder showing complete Kelvinator line. Write: Dept. FSF, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.*

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Get Kelvinator

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New! LOW COST OIL-O-MATIC HEATING

NEW! *Sealed Thrift Unit . . . controls oil to the drop! An exclusive feature of "Low Pressure" design! Trouble-Free! Saves Oil . . . Saves Money!*

NEW! *Vair-O-Meter . . . meters delivery of air to assure clean flame, complete combustion . . . 20% Hotter Fire . . . More Heat at Lower Cost!*

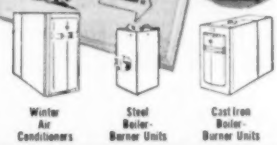
NEW! *Low Pressure Nozzle . . . metered control and Low Pressure delivery of oil and air permits large opening nozzle. Non-clogging . . . Trouble-free.*

OIL-O-MATIC OFFERS AMAZING PROOF . . . SEND FOR YOUR COPY TODAY!

We felt it was our duty to publish the facts, *the point by point comparisons* about all types of automatic oil heating! You *must* read every word of this easy-to-understand booklet *before* you invest in home heating . . .

NEW MODEL *Fifty Ten*...

. . . for homes of all sizes
. . . for all types of heating
FUEL AND DOLLAR SAVINGS NEVER BEFORE POSSIBLE



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SF-2

For good living indoors and out

Home No. S1811. This home is the increasingly popular Ranch style, and it has *Successful Farming's* Big Three points for remodeled or new houses: (1) an entrance on the driveway to bring visitors into the living room instead of the kitchen; (2) a central hallway that eliminates tracking through one room to get to another; (3) a utility or workroom to keep those dirty, messy jobs out of the kitchen. The entire house is planned for stepsaving, one of the most important features in any farm home.

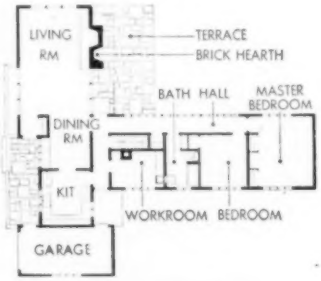
In the plans, we've included an outdoor fireplace and paved terrace which really give you an outdoor "living room." Of course, this home can be built without the outdoor living features if you prefer.

Any home is more cheerful if it's well lighted, and this home is no exception. On the side facing the fireplace area, three windows of insulating glass, running from floor to ceiling, frame summer and winter views of the garden area. Windows of the same kind and size are set in the end of the living room. As a matter of fact, the windows in all the rooms offer a bright and cheerful future to families who build this home. You'll notice also by the floor plan that the bathroom is planned for absolute privacy. It's easily reached from all bedrooms and from other rooms.

The plan set for this home shows two alternate plans as well as this one—a plan for only one bedroom to begin with, and a plan for three bedrooms.

A set of seven full-sized and completely detailed working drawings, plus a cost-finding list of materials and a specifications form, will be sent to you postpaid for only $2.50. Or you may purchase the set from any one of the department stores listed on page 30, or from any lumberyard cooperating with our Home Planning Service.

If you prefer to order from us direct by mail, please send your order to *Successful Farming*, 1202 Meredith Building, Des Moines 3, Iowa. Remember: The number of this house and of the plan set is S1811. Be sure to mention that number when you order your plans. **END**



Hearty breakfast and supper dishes

[*From page 50*]

Spanish Potatoes

Serves 6 to 8

Melt . . . . . **½ cup shortening** in large skillet
Brown lightly in fat:
2 tablespoons minced onion
⅓ cup chopped green pepper
⅓ cup chopped pimiento
Add . . . . . **4 cups diced, cold, cooked potatoes**
1 cup diced, cooked ham
1½ cups canned whole kernel corn, drained
2 teaspoons salt
¼ teaspoon pepper
1 teaspoon paprika
Cook until potatoes are golden brown.

Scrambled Eggs and Ham

Serves 8

Beat well 12 eggs
Add . . . . . **⅔ to 1 cup heavy cream**
1 teaspoon salt
½ teaspoon pepper
½ teaspoon Worcestershire sauce
Melt . . . . . **4 tablespoons butter** in hot skillet
Pour in egg mixture.
Cook slowly until set, stirring the mixture frequently.
Pile in center of warm platter.
Top with **¼ cup shredded cheese**
Serve with **slices of fried ham** and **fresh tomato wedges.**

Orange Blossom

Cut small hole into **orange** at stem end
Cut just through skin of orange, down toward the bottom as though you were cutting it lengthwise. Do this in order to form the petals.
Separate each petal from the orange.
Separate the orange sections ⅔ of the way to the bottom.
Place . . . . **2 maraschino cherries** in center of each orange
Garnish further, if desired, with **mint** or **other green leaves.** END

SUCCESSFUL FARMING

My AMERICAN KITCHEN Saves Me 2 Hours a Day to Spend as I Please!

(. . . AND WE BOUGHT IT ON EASY FHA TERMS— WITH 3 YEARS TO PAY!)

Cut YOUR Kitchen Work Up to ½ With These Extra American Kitchens Time and Work Savers

No Money Down!

Imagine *you* with up to 2 extra free hours a day! It's *easy*—because now you can get a bright, cheerful, American Kitchen on low FHA terms, with 3 years to pay—less than $5 a week for all units shown above, complete with these "magic extras!"

1 *Rounded* drawer interiors—easier to clean!
2 No "dirt trap" door handles! . . . Open at touch of finger . . . Can't stand ajar!
3 Planned work centers cut steps to minimum!
4 Extended counters—knee room for comfortable standing! Recessed toe space.
5 Chopping board, divided cutlery drawer, cleanser rack—all within easy reach.
6 Roomy utility cabinet—upper section for linens, lower for brooms, mops, aprons.
7 Built-in bread box, flour bin, cup shelves, spice racks—everything at your finger-tips!
8 Non-splash, lever-type faucet . . . swing spout . . . push-button spray . . . over-size sink bowl.

Increase *your* home's value . . . and escape drudgery—with a thrifty American Kitchen! No down payment, 3 years to pay. Fit kitchens of all sizes, all shapes—new or old. Mail coupon with 25¢ for amazing plan kit and see how *you* can save up to 2 hours work every day!

For Name of Your Nearest Dealer, Call Western Union by Number. Ask for Operator 25.

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MAIL ME TODAY FOR COMPLETE PLANNING KIT!

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AVCO Manufacturing Corporation, Connersville, Ind.

Here's 25¢—rush me your complete planning kit, including new Model Kitchen Designer (with movable units) and new full-color catalog.

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AFTER A ROUND OF WINTER CHORES—

Nescafé makes roaster-fresh coffee . . . instantly!

YOU'LL marvel at this instant way to pure coffee enjoyment. Nescafé* knows the way to bring you *all* the flavor and "lift" of pure, freshly roasted, freshly brewed coffee—*without* the fuss and muss of brewing.

Best-tasting "instant" ever, Nescafé is specially processed to *keep* its roaster-fresh flavor until you release it in the cup—fresh every time.

With Nescafé you can either make coffee *right in the cup*—or measure the number of servings you'll need into a large pot—add hot water (preferably boiling) and stir.

Even the 4-oz. jar makes about as many cups as a pound of ordinary coffee—yet *costs you less!* And there's never any waste. Order a jar today. For extra economy get the big family size!

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NESCAFÉ

THAN ANY OTHER INSTANT COFFEE!

*Nescafé (pronounced NES-CAFAY) is the exclusive registered trade-mark of The Nestlé Company, Inc. to designate its soluble coffee product which is composed of equal parts of pure soluble coffee and added pure carbohydrates (dextrins, maltose and dextrose) added solely to protect the flavor.

THE FARM

Quizbox

By Gus Larson

A Montana schoolboy writes: "Dear Quizbox: I have three questions for your quiz. They are: Which president had a private telephone from the White House to his sweetheart's home in Washington? How long can a person stay awake? What causes some children to 'skip' school regularly?" I liked the questions, so here they are—plus some of my own.

Score 5 points for each correct reply. If you score (a) 90 to 100 points—tops. (b) 75 to 85 points—good. (c) 50 to 70 points—fair. (d) 30 to 45 points—barely passed. (e) 25 points or below—failed.

1. Isn't it fun to stretch? But why do we do it? Is stretching necessary to (a) tighten muscles (b) loosen muscles (c) improve circulation?

2. A bottle was dropped at sea near Cape Horn on May 31, 1909. Three years later it was picked up on the west coast of New Zealand. Bottle drifted (a) 100 miles (b) 1,000 miles (c) 10,000 miles.

3. The tune, "Hail to the Chief," is played at every public appearance of the president of the United States. Where did the music originate? (a) written by John Philip Sousa (b) an ancient tune of Scottish chiefs (c) an Irving Berlin number.

4. Bacon from hogs which are tired at time of slaughter will develop brown color on the cut surface. Remedy: Feed hogs sugar 10 hours before slaughter. (a) true (b) false.

5. Here's testing you on dance etiquette. An engaged couple danced only with each other throughout the evening. This was (a) entirely proper (b) rude.

6. Thomas Alva Edison did not invent the electric light. An Englishman, Sir Humphry Davy, invented it in 1802. This statement is (a) true (b) false.

7. One type of spider spins itself a diving bell for going under water. Though spiders are geometrical wizards in building webs, they cannot repair them. Statements are (a) true (b) false.

8. A rare condition of the human body is when perspiration is blue, yellow, green, milk-white, or coal-black. This peculiar condition is known as (a) chromidrosis (b) appleica (c) Perspiration X.

9. Weakness, chills, fever, aches "all over," loss of appetite, and mental depression are symptoms of undulant fever. This disease is contracted by (a) drinking raw milk infected with Bang's disease organisms (b) people in South America.

10. Know how a tree grows in height? Would you guess (a) from the top only (b) throughout its entire length (c) from the bottom only?

11. There are nearly 2,000 bulls in artificial breeding associations in this country. These sires serve nearly 1,250 cows each. What percentage of all cows in the U. S. are now bred artificially? (a) 75 percent (b) 50 percent (c) 10 percent.

12. What causes some children to "skip" school regularly? Would you say that the most likely reasons for most truancy are (a) broken homes and poor family environments (b) children just naturally dislike school and resent teachers?

13. Here's a "toughie" for "sleepyheads." What is your guess as to the longest time on record that anyone has been able to go without sleep? (a) 161 hours (b) 230 hours (c) 1,001 hours.

14. Mrs. Tilford said: "Children can't get diabetes. I have never heard of small children having the disease." But neighbor Helen Swanson said: "Children can get this disease." Who is right? (a) Mrs. Tilford (b) Mrs. Swanson.

15. Which of our presidents had a private telephone line connected from the White House to his sweetheart's home in Washington? Was it (a) Wilson (b) Cleveland (c) Harrison?

16. In what year was America's "ideal woman" short, sway-backed, pinch-waisted, narrow-shouldered, and pigeon-chested? (a) 1920 (b) 1915 (c) 1900.

17. Everyone read last year's news about the dwarf cattle from the "lost canyon." These miniature Hereford cattle weighing from 160 to 200 pounds (a) were really raised on a Montana ranch (b) came from a "lost canyon" of the West.

18. Cows with ketosis usually go off feed, become listless, go down in milk production, and lose weight rapidly. This ailment occurs (a) in old age only (b) a few weeks after calving.

19. A bite into a juicy, crackly apple is a mighty fine taste treat. How long have apples been cultivated by man? Since (a) days of Columbus (b) time of Christ (c) many thousands of years before Christ.

20. The wolf-moth larva can penetrate the hardest wood, even lead. Statement is (a) true (b) false.

Answers on page 68

SUCCESSFUL FARMING

"The school bus is waiting!"

Like biscuits plain? Fancy? A little different?

Calumet's Basic Biscuit Recipe gives you all *three*—all super-wonderful—all Calumet-perfect!

Luscious—just plain! Calumet's double-action gives you the lightest, tenderest biscuits ever! Golden-brown, fluffy and so delicious! See the *wonderful difference* Calumet's double-action makes in your biscuit baking!

Fine—when fancy! Add ½ cup chopped leftover meat, or ¼ cup grated raw carrot and 1 tablespoon chopped parsley to the basic recipe below and you have Calumet biscuits in fancy dress. You'll be glad Calumet raises your batter *twice* (first in the mixing bowl, later in the oven) when you see the luscious results this double-action gives you *every time*.

Delightful—when different! Add 1 cup of grated American cheese to your flour mixture and sprinkle with paprika before baking. You'll get Cheese Biscuits that'll set the family yelling for more. It's so easy to turn out all kinds of biscuits—all perfect with Calumet Baking Powder.

CALUMET'S BASIC BISCUIT RECIPE

2 cups sifted flour
2½ teaspoons Calumet Baking Powder
¾ teaspoon salt
5 tablespoons shortening
¾ cup milk (about)

Sift flour once, measure, add baking powder and salt, and sift again. Cut in shortening. Add milk and stir with fork until soft dough is formed (about 20 strokes). Turn out on lightly floured board and knead 20 turns. Pat or roll lightly ½ inch thick and cut with floured 2-inch biscuit cutter. Bake on ungreased baking sheet in hot oven (450° F.) 12 to 15 minutes. Makes 14 biscuits.

(All measurements are level)

Discover for yourself the *wonderful difference* Calumet makes in *all* your baking—cakes as well as biscuits. That's why more women use Calumet than any other baking powder.

Look for Calumet's Special Offer on the economical 1-lb. can!

CALUMET BAKING POWDER

Double-acting...for Double-sure Success!

A product of General Foods

flavor THROUGH and THROUGH

makes Van Camp's the favorite with folks who grow food . . . know food

Beans are beans under ordinary brands . . . but beans that bear the label of **Van Camp's** are different . . . more delicious . . . for **Van Camp's** give you flavor through and through.

The flavor of the savory secret sauce . . . made from red, ripe tomatoes (such as you grow yourself) and of sweet tender pork (the kind you know so well). By **Van Camp's** exclusive flavor-penetration method . . . every whole, choice, plump bean is brimming with the rich flavor of this superb sauce—and there's plenty of sauce to keep **Van Camp's** moist and mouth-watering when you heat them.

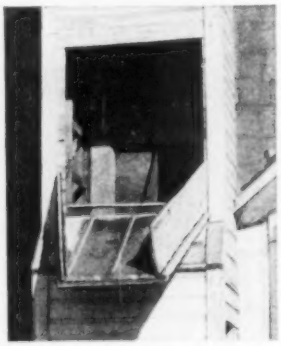
No wonder folks who grow food . . . know food . . . count **Van Camp's** the favorite . . . buy **Van Camp's** by the dozen . . . the case . . . serve them often . . . serve them generously.

IT'S Van Camp's FOR flavor THROUGH and THROUGH

Successful

SHORT CUTS

Build them yourself, save time and dollars



Silage chute saves labor for Elmer Paul, Story County, Iowa. As silage is thrown down, it hits chute and is loaded directly into truck or wagon

Loading chute, on wheels, is easily pulled back of truck. Adjustable small wheels from an old semitrailer permit quick alignment with any truck bed. It's towed in low, horizontal position

Extra-wide fork is handy, says Clarence Purfeerst, Rice County, Minnesota. He uses it for carrying chopped straw or hay, and as a rake for cleaning out stalls. Wooden tines are attached to stout 2x2

An old boiler supplies the large amounts of hot water needed for cleaning hog houses. Rubber hoses carry water from pressure outlets

Nails and screws are easy to find in Clarence Evans' shop, Lancaster County, Nebraska. He fastened lids of small, screw-top jars to revolving, 4-sided wood frame. Nails are easy to find, yet they are out of the way until the moment they are needed

2-ton shown with 14-foot stock rack
— 1½-ton also available

Studebaker 8-foot pick-up — ¾-ton (shown) or
1-ton; ½-ton 6½-ft. pick-up also available

1½-ton 12-foot platform stake
—2-ton also available

1½-ton shown with 12-foot grain
body—2-ton also available

1½-ton shown with insulated milk
body—2-ton also available

Studebaker trucks excel in low operating cost

Sizes and wheelbases for hundreds of needs!

KEEP more of your farming income untouched by truck operating outgo.

Haul your loads the modern economy way—get a husky, handsome, trustworthy new Studebaker truck.

Get the stand-out pulling power—and the stand-up staying power—of a Studebaker Econ-o-miser or Power-Plus truck engine.

Get ruggedness that counts—and get it where it counts—with a Studebaker truck's "plus" of frame length for maximum load space—with tremendously sturdy rear axles—with exceptionally strong springs.

Get a roomy, big-vision Studebaker cab—with weather-protected safety steps inside the doors. It's the "day-long-comfort" cab that drivers call America's finest. Stop in and check up on a Studebaker truck at a nearby showroom.

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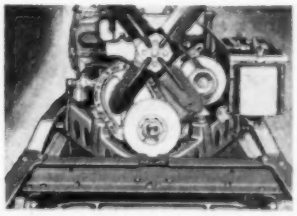
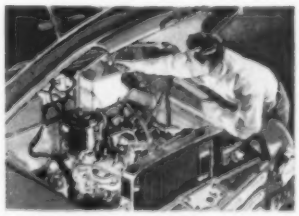


Exclusive K-member frame!

Look at that massive, rigid K-member! It's used in all Studebaker trucks. It gives firm support to the engine mounts—reinforces the truck's whole front structure—one of many wear-resisting Studebaker features.



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No standing on a box to service a Studebaker truck! Wide-opening hood and close-set fenders give real "lift-the-hood" accessibility. Engine, ignition and instrument panel wiring are within easy arm's reach.

Keep FARM RECORDS THIS *easy* WAY

Smith-Corona ADDING MACHINE

Know where your money goes . . . where your profits come from. Keep accurate and detailed records of your costs . . . labor, seed, fertilizer, lime, supplies, machine hire, gasoline, repairs and maintenance. Be able to claim all the deductions you are allowed on your income tax.

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You can do it easily and quickly with a Smith-Corona, the adding machine that anyone can use. No training needed. Every figure is visible as you enter it on the keyboard. You can correct any single figure, or all figures if necessary, simply by pressing a key. The record tape shows instantly what you have added. When the final tape record checks with the figures you are adding, you know the total is correct to the last penny. No tiresome re-adding required.

Proved for 25 Years

Smith-Corona is a proved machine with a 25-year record of trouble-free service. Made by a famous old-line typewriter manufacturer, it is designed and priced especially for farm and small-business use. See it at Smith-Corona branches or leading typewriter and office supply stores everywhere.

Easy payments $10 down; $8 per month.

Price in "Fair Trade" States, Only $107.50, plus tax subject to change

Fill out the coupon and we'll tell you by return mail where you can get a demonstration or a free trial offer, with no obligation to buy.

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Please tell me where I can see a demonstration or get a free trial of the Smith-Corona Adding Machine:

My nearest big trading center is.....

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Name.....

P.O.....R. D. Route.....State.....

It's easy to have more shelves

Simple shelves, planned and built for a specific use, can do a lot to solve the where-to-put-it problems in any home. Here are easy directions for several kinds

Strong shelves usually can be built most economically of 1-inch pine lumber. It's worth the extra cost to buy finished lumber, clear of knots. If you want a back on your shelves, cut it from thin hardboard or plywood. If you omit the back and the shelves show signs of swaying, brace them with ½-inch wood strips placed diagonally across the back. You can nail a set of shelves together, but screws will increase the strength of the joints.

Here, and on the pages following, are nine tested ideas for building shelves. Construction in each case is simple. You won't even need power tools. Most of these shelves can be built with a hammer, saw, brace and bit, screwdriver, rule, and an L-square.

Basic shelf construction. Shelves butted tight against solid endpieces and screwed in place are simple to build. Use stop washers to permit tightening of the screws without chewing into the wood.

If your lumber dealer doesn't sell lumber cut to size, measure each piece accurately with a steel tape or wood rule for length. Mark your cutting line on both sides and both edges with a square; then be sure saw blade is following along lines on either side. Of course, a circular or portable power saw would be better.

Another important detail is to mark carefully where you want each shelf piece to meet the endpieces, so finished shelving will be exactly level. A stick with nails driven through and sticking out of one side at the desired positions of the shelf bottoms will enable you to prick in a set of marks exactly the same on either endpiece. Then tack the shelves in place on the endpieces with small, thin nails while you drill pilot holes and drive the screws in place. If you'll turn the shelf until it's over on its side while tightening up the screws, you'll get less wobble.

If the shelf piece is not mortised into the endpieces or sidepieces, use long wood screws (2½" to 3") that will act something like dowels. In mortised work, 2½" will be plenty good for 1" lumber. Place all screws about 2" apart.

Before painting, you'll find it a good idea to round all edges of the shelf unit with sandpaper; enamel finishes will not crack off over a slightly rounded surface, whereas a sharp edge is just an invitation to damage and peeling.

Where shelves as described above are to carry very heavy loads, it would be well to mortise them into the endpieces (which isn't easy with hand tools) or to screw "keeper" strips of wood to the endpieces, just above and below the shelf ends themselves. Be sure they're tight!

Adjustable shelves for light loads. Small, metal clips fitted with metal dowels (see sketch) can be used to provide readily adjustable shelf heights. You can find them in most hardware stores. Drill dowel holes *after* you measure dowels! Control depth of holes by boring a small stick lengthwise and trimming for depth stop as in the sketch. Another way to support shelves is upon screw eyes screwed, in turn, to bottoms. Again, see sketch. [*Turn to page 66*]

SEE THE DIFFERENCE!

Run your eyes over Body by Fisher with close and shrewd appraisal, and check it against other cars you've seen. Look for sturdy, strong construction — to keep you safer on the road — to keep smart good looks lasting longer. Look for better materials all around, such as the mark of Safety *Plate* Glass on windshield and windows alike!

HEAR THE DIFFERENCE! Slam any door and listen to that solid *THUD!* There you hear stout steel welded into a rugged, reinforced body that will stand up for you in all weather — on all kinds of roads.

FEEL THE DIFFERENCE! Try the comfort of those deep-sprung seats — stretch your arms and legs, and measure the roominess. Feel the upholstery in your hand — how rich it is, how durable.

These extra-value features are all yours on General Motors cars—*the only cars with Body by Fisher.*

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— BETTER THAN EVER!

Ladies! beautify yo' home with my pretty Aunt Jemima Lamp

SEND NOW! Charming

HURRICANE LAMP to highlight the beauty of your home

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and 1 Aunt Jemima box or sack top

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City _____ Zone _____ State _____

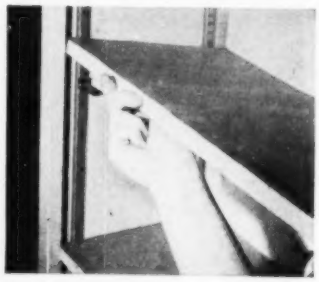
SUPPLY LIMITED! Offer expires April 1, 1950. Good only in the United States.

More shelves

[*From page 64*]

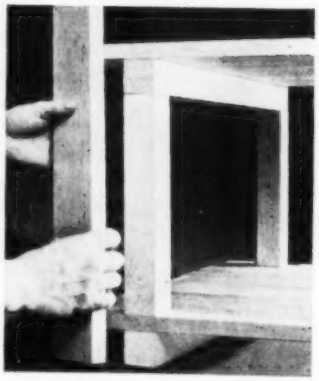
Adjustable shelves for heavy loads. If shelves are to carry heavy objects such as books, you can make them adjustable by using supporting metal strips and clips such as shown in the photograph. These are known as pilaster strips, standard strips, or ratchet strips.

For strength, these strips should be fastened with screws. Be sure, before attaching the strips permanently with

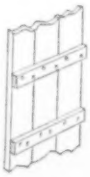


screws, that you have lined up the holes in all the strips accurately.

Sometimes the strips aren't cut exactly at the same point, or you may not want them to start at the bottom of the case. You can level them with a stick that has a slightly projecting nail at one side. Rest the stick on the bottom of the case, and put nail in corresponding hole in opposite strip before attaching it. Tack strip in place before you fasten it with screws.

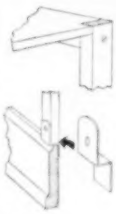


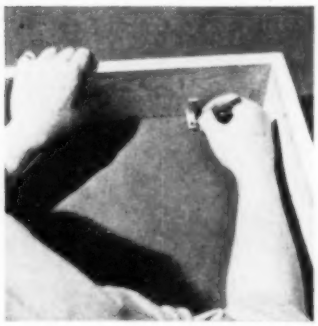
For a heavy load. Especially where several boards make up the shelf, cleats placed as in drawing below give added strength. Of course, they're unsightly and are usually used in basement storage. Screws should go in from inside, nails from outside, with points bent across grain. See the drawing. Long shelves may be supported at 3' intervals by inverted-U supports as shown in picture above. Place *between* cleats where cleats are used. U-supports are usually built of 2x2's. Facing board (shown in hands) improves the looks of a shelf unit.



If this type of shelf is to be used for fruit and canned-food storage, be sure shelves are spaced far enough apart to allow vision beyond front row. Try hanging curtains across the front to protect the contents from dust and dirt. Be sure that shelves for heavy storage are securely fastened to the wall.

Temporary closet shelves. Sometimes you need closet shelves, but hesitate to mar plastered walls. In this case, build an inverted-U support for the back of the closet in which the uprights are *kept* upright by pressure of notched corners in the shelving, as shown in sketch. Supports should be of 1" wood, their bottoms held to wall and closet baseboard by metal clips slipped behind the baseboard as in the sketch. Shelving can be as light as ½" pine. With heavier lumber, this method can convert clothes closets into linen storages. Inverted-U frames can likewise be used to provide basement storage, but shelves used to carry heavy objects should be firmly bolted to the walls.





Knickknack shelves. Good, adjustable shelves for light loads can be fitted into a simple, boxlike frame. Attach the frame to the wall with L-shaped corner braces, driving fairly long screws through plaster and lath into wall studs. *Turn to page 92*

...my husband agreed Caloric Has Everything*

*Typical of thousands of letters received from Caloric owners.

We shopped and compared a lot of ranges for value, and Caloric had everything. I was thrilled with its easier-cooking and easier-cleaning features—Dual Burners, Removable Broiler, Hold-Heat Oven . . . .

...and my husband clinched it when he said, "This Caloric is well-made --the sturdiest range I've ever seen."

1 "America's Easiest Ranges to Keep Clean." Porcelain enamel finish inside and out. Seamless Top, Oven, Burner Box, removable Broiler.

2 Faster, Easier Cooking with LP-Gas.** Flavor-Saver Dual Burners speed cooking, hold flavor, save gas. Clock-controlled Oven cooks automatically.

3 Lifetime Beauty. Acid-Resisting Porcelain Top, Front, Sides. Rigid Steel Construction. 2-Oven, 2-Broiler models for big family use, and other burner and broiler arrangements to suit you. Write Caloric Stove Corporation, Widener Building, Philadelphia 7, Pa.

Guaranteed by Good Housekeeping

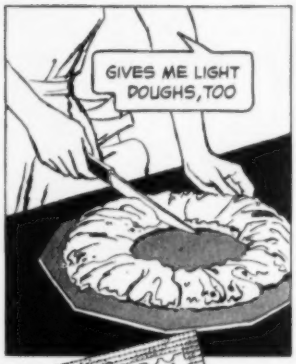
**Any Caloric model can be factory-equipped for "Pyrofax" Gas or other LP-Gases ("Bottled" Gas). "CP" features optional on all models give automatic cooking.

Ultramatic Caloric Automatic Gas Ranges

AMERICA'S EASIEST RANGES TO KEEP CLEAN

FOR WOMEN
(WHO BAKE AT HOME)
ONLY

GLAD TIDINGS!



LOOKIT—buy 3 packages at a time. Keep it handy on your pantry shelf. Needs no refrigeration positively!

3 times as many women prefer FLEISCHMANN'S YEAST

10 ROSA MULTIFLORA 1

Nothing finer for a beautiful, permanent hedge or shelter barrier. 1 year, 6-10 inch plants. Charming white blossoms. Hardy, quick growing. **All 10 only $1 postpaid.** ORDER THEM NOW. Evergreen Shrubs and COMPLETE CATALOG FREE.

BERRY SEED CO., Box 5219, Clarinda, Iowa

FREE to STOUT WOMEN

Merely mail coupon for FREE Money-Saving 100-page Style Book. Styles proportioned by experts who know how to slenderize stout women. Also slacks, suits, coats, hats, shoes and underwear—all low priced. Mail the coupon now.

Lane Bryant DEPT. 93 752 EAST MARKET ST. INDIANAPOLIS 17, IND.

LANE BRYANT, Department 93
752 East Market Street, Indianapolis 17, Indiana.
Please rush me FREE Style Book for stout women.

Name.....

Address.....

Post Office.....*State*.....

A home planning service tailored to farm living is being offered by one store near you. See page 30.

Save $2.00 On This Home Mixed Cough Syrup

Easily Mixed. Needs No Cooking.

Cough medicines usually contain a large quantity of plain syrup—a good ingredient, but one which you can easily make at home. Mix 2 cups of granulated sugar with 1 cup of water. No cooking! Or you can use corn syrup or liquid honey, instead of sugar syrup.

Then get from your druggist 2½ ounces of Pinex, pour it into a pint bottle, and fill up with your syrup. This gives you a full pint of wonderful medicine for coughs due to colds. It makes a real saving because it gives you about four times as much for your money. Never spoils, and children love it.

This is actually a surprisingly effective, quick-acting cough medicine. Soothe, you feel it taking hold. It loosens phlegm, soothes irritated membranes, makes breathing easy.

Pinex is a special compound of proven ingredients, in concentrated form, a most reliable, soothing agent for throat and bronchial irritations. Money refunded if it doesn't please you in every way.

FOR EXTRA CONVENIENCE GET NEW READY-MIXED, READY-TO-USE PINEX!

THE PINEX CO., FORT WAYNE, IND.

Answers to farm quizbox

[*From page 61*]

1. (c) is correct. We stretch to improve circulation.

2. (c) is correct. Bottle drifted 10,250 miles.

3. (b) is correct. Tune originated among Scottish chiefs; words are from Sir Walter Scott's *Lady of the Lake*.

4. (a) is correct. By feeding hogs sugar before slaughter, muscle sugar lost through exercise is restored, reports a British feeding expert.

5. (b) is correct. This is rude, states *Redbook* magazine.

6. (a) is correct. But without practical development of Edison's incandescent lamp, we might still be using oil lamps and gaslights.

7. (a) is correct. Statements are true, according to *Pests Magazine*.

8. (a) is correct. Condition is known as chromidrosis.

9. (a) is correct. Raw milk is dangerous, reports the National Research Council.

10. (a) is correct. Trees grow only from the top.

11. (c) is correct. The Bureau of Dairy Industry reports that 10 percent of all cows in the United States are now bred artificially.

12. (a) is correct. A Citizens' Committee of New York City concludes that most truancy results from broken homes and poor environment.

13. (b) is correct. A University of Michigan student stayed awake 230 hours in a laboratory test.

14. (b) is correct. The American Diabetes Association reports that children can contract the disease.

15. (a) is correct. Col. F. W. Starling, in *Starling of the White House*, tells this story.

16. (c) is correct. The "ideal" American girl of 1900 fit this description.

17. (a) is correct. Story was a hoax and cattle were really raised on ranch.

18. (b) is correct. Best treatment is intravenous injection of dextrose followed by feeding of molasses or common table sugar, states Dr. J. Shaw, University of Maryland.

19. (c) is correct. Cultivation of fruit began before recorded history.

20. (a) is correct. According to *Pests Magazine*, the statements are true. **END**

Have you tried *Successful Farming*'s Farm and Home Service Bureau for free, postpaid answers to your home and farm management problems? Why not write us about them now?

Why you should have a dryer

[*From page 49*]

Being human, a woman doesn't like to stoop or bend or stretch or carry or climb steps unless she has to. With a dryer in the house she has to do less of all of these. One survey indicates that the average woman walks about 40 miles a year while carrying and hanging clothes. So, with a dryer, you'll be at least 40 miles younger.

The users of dryers also report a savings in clothes—which should interest the breadwinner in your family. Cylinder-type dryers (shown on pages 48-49) have a gentle tumbling motion created by

Slipcovers dry beautifully. If you take them from dryer slightly damp and put them on immediately, you'll get a smooth, glove-tight fit. Another good bit of laborsaving

a cylinder which goes round and round. This tumbling motion, plus heat, causes the drying—a process which eliminates the wear and tear from clothespins, violent winds, and freezing on cold days. This means no whipped-out corners, fewer frayed edges, and longer-lasting wardrobes—and again, time saved in mending and repairing.

Our homemakers remarked on a few things about which they were not exactly delighted: One was a humidity problem. The moisture from wet clothes has to go somewhere. The natural place for it to go

[*Turn to page 70*

Nylon sweaters dry soft and fluffy-as-down in a jiffy. Rayons dry rapidly, too. Woolen blankets can be dried in unit if dried according to manufacturer's directions

Easy to change from inside.
Ventilation with protection from rain.
Can be stored in a small space.

* Optional . . . Superior Windows can be ordered equipped with Bilt-Well Storm Sash and Screen Units.

Choose Superior Windows because of the exclusive patented weatherstrip which compensates for any possible swelling or shrinking. Your curtains and draperies will stay clean longer, because this weatherstrip stops dust infiltration. And, there is always the satisfaction of knowing you can open these easy-sliding windows when desired.

Ask your Lumber Dealer for Superior Windows!

BILT-WELL WOOD WORK CARR, ADAMS & COLLIER COMPANY
DUBUQUE, IOWA

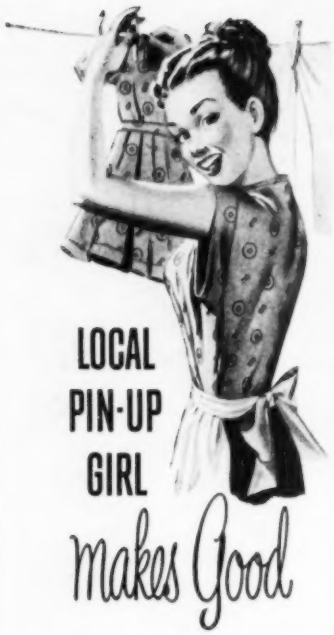
WHAT TO LOOK FOR WHEN YOU BUY A MONUMENT!

A monument is an important *family* purchase to honor the family name in the traditional American way. It is a once-in-a-lifetime purchase involving three very important things: quality, design, craftsmanship.

You, your family, and your descendants will always be proud of a monument bearing the Seal of the Barre Guild because such monuments are made only of *Select Barre Granite* which eminent scientists call "the finest monument material in the world." Select Barre Granite is beautifully and uniformly textured. It has a *living* "glow" like a precious jewel. It won't chip and resists weatherstain through the ages.

The monument dealer who displays the Seal of the Barre Guild and shows it to you (see illustration above) is a monument craftsman who may be depended upon. With a Guild-approved monument, he endorses to you the Guild Certificate of Quality which is backed by the entire monument industry in Barre, Vermont, "Granite Center of the World." If you want the name of the Barre Guild dealers nearest you, write to the address in the offer below.

Send for MONUMENT IDEAS—*free — 16 pages profusely illustrated. More than 40 monument suggestions. Address: SF-52, Barre, Vermont.*



LOCAL PIN-UP GIRL *makes Good*

. . . she *makes good* dresses, and curtains, and play clothes—and many, many other useful items for the home and family. And, she makes them from plain white and colorful COTTON FEED BAGS. Your local feed dealer has them in the smartest patterns and the loveliest colors! See them and note the "lift" they will give your budget!

Sew

HUNDREDS OF PRACTICAL, USEFUL ITEMS FOR THE HOME AND FAMILY . . .

It's easy to do . . . and it's fun. Send for your copy of the Cotton Bag Sewing Booklet.

National Cotton Council of America
P. O. Box 76, Memphis 1, Tenn.
Please send me FREE your brand-new 1950 Cotton Bag Sewing Booklet.

Name.....

Address.....

Town.....

State.....(3B)

Why you should have a dryer

[*From page 69*]

is into the room housing the dryer. For this reason, install your dryer where there is good ventilation. If possible, locate it near a window. If that is impossible, the best solution is to install an ordinary kitchen or workroom exhaust fan, or vent an exhaust from the dryer directly outside.

Another problem is lint. Dryers do not make lint, but they do release the lint developed in washing. Most tumbler dryers have lint screens or traps, but still some lint does blow into the room.

Homemakers assured me that these problems were extremely minor compared with a dryer's advantages. Wherever you have wet clothes, you will have humidity and lint.

Types of dryers. Now a bit on the dryers themselves. There are two general types—the cabinet type, equipped with heating elements and drying racks; and the tumbler or revolving-cylinder type, which is equipped with heating elements and forced circulation of warm air.

All dryers operate on either gas (natural, mixed, or bottled) or electricity. Almost all tumbler-type dryers operate on a ¼ hp motor. The gas dryers require a 110-volt electric connection and the all-electric dryers require 220 to 230 volts.

Whether you install a gas or an electric dryer will depend on your local situation and the rates for each in your community. In some communities, because electric dryers require high voltage, your power supplier may request that you use the dryer at certain hours when the lines are not carrying a peak load.

How do you operate a dryer? The operation of a dryer is actually as simple as 1-2-3. You merely open the door, toss in the wet clothes, close the door tightly, turn the "On" dial, and set the timer. Most dryers have a heat-control dial which you can set to *low* (for nylon, rayon, all synthetics), *medium* (for rayon, cotton knits), or *high* (for linen, cotton, and heavy-pile fabrics like corduroy, chenilles, towels). Simply remove the clothes when the dryer shuts off, and clean out the lint screen at the end of each drying day.

The actual length of time it takes to dry a load of clothes depends on the type of clothes. For instance, rayon holds moisture longer than lightweight cottons. Heavy cottons take longer to dry than light cottons. Chenille bedspreads, bathroom rugs, and Turkish towels take fairly long to dry because of their deep, pile construction.

Also, length of drying time depends on the weight of the load—naturally, the smaller the load, the shorter the drying time. However, generally speaking, most dryers will remove from 8 to 12 pounds of moisture per hour.

One manufacturer's table, appearing at the bottom of this page, will give a good idea of drying times.

How much does it cost? The initial cost of a dryer is in the neighborhood of $220 to $270. Of course, this price range varies slightly with locality and manufacturer. The above cost does not include installation. It costs from $10 to $50 to install most dryers. Again, the cost varies with the type of dryer and the type of wiring already in your home.

Actual cost of operating a dryer also varies with different sections of the country and the number of appliances already owned. If you are already using a high wattage of electricity, your rate will be relatively low. As nearly as we could estimate, the electric dryer will operate at 4 to 10 cents per load, seldom above 10 cents. Usually the gas dryers cost somewhat less to operate. You'll be wise to make a careful check on gas versus electric rates before you buy a dryer. The dryer manufacturers and your local dealers will supply you with much more detailed information upon your request.

Hints for using a dryer: The automatic dryer is an entirely separate piece of equipment, as is a washer or an ironer. You don't need an automatic washer to use an automatic dryer. In fact, some women prefer the conventional washer-automatic dryer combination.

Sort clothes for drying as they are sorted for washing. Colored clothes that can be washed safely with white clothes can be dried safely with white clothes.

Preheat the dryer before putting wet clothes in it. Preheating makes for more efficient drying. Dry several loads while the dryer is hot. This procedure means a slight saving in cost of operation.

Such are the highlights on automatic clothes dryers. The operating cost of a dryer is modest in comparison with the benefits it gives. You should have a dryer because it will be a great contributor to your health, comfort, and leisure. Don't take my word for it. Ask any woman who owns one. **END**

Material	Weight of dryer load	Heat	Drying time	
			Damp-dry	Completely dry
Rayon and lightweight cottons	4 pounds	Low	15-20 min.	20-25 min.
Mediumweight cottons	9 pounds	Medium	25-30 min.	40-50 min.
Heavy cottons	9 pounds	High	30-40 min.	50-60 min.
Chenille bedspreads	4-5 pounds	High		60-70 min.
Pillows	2-3 pounds	High		60-70 min.

Brisk Breakfasts without Bustle

Apple-tizing Rice Krispies is this month's Kellogg-Quickie. When you have baked apples or applesauce on hand—center your fruit in Rice Krispies. Here's a real *breakfast main dish* . . . for Rice Krispies contain most of the nutritive values of whole brown rice.

* * *

From mother of four: "Rice Krispies are especially easy for two-year-old Mary to spoon up without help!" notes Mrs. Donald Saunders of Maplewood, N. J. "But all six of us go for Rice Krispies . . . for that snap! crackle! pop!"

* * *

"Teen-agers. Going without breakfast knocks you out fast!" says Betty Betz — columnist for young Americans. "By mid-morning you're starving, so you wrestle with a fattening sweet. Start the day with a breakfast main dish of your favorite Kellogg cereal, milk and fruit—a real send-off!"

* * *

Recipe's on the box! "A batch of Rice Krispies Marshmallow Squares takes no time. And they go over big for lunch boxes and Scout meetings!" writes Mrs. M. F. Gregg of Glendale, Cal. "Also, the children like to fix their own Rice Krispies for after-school snacks!"

* * *

"We are seven at the breakfast table. And how do I please all our gang? With that 10-box choice in Kellogg's VARIETY. It's the assortment that doesn't let us down, because every cereal is a real favorite!" says Mrs. W. M. Cramp of Old Greenwich, Conn.

* * *

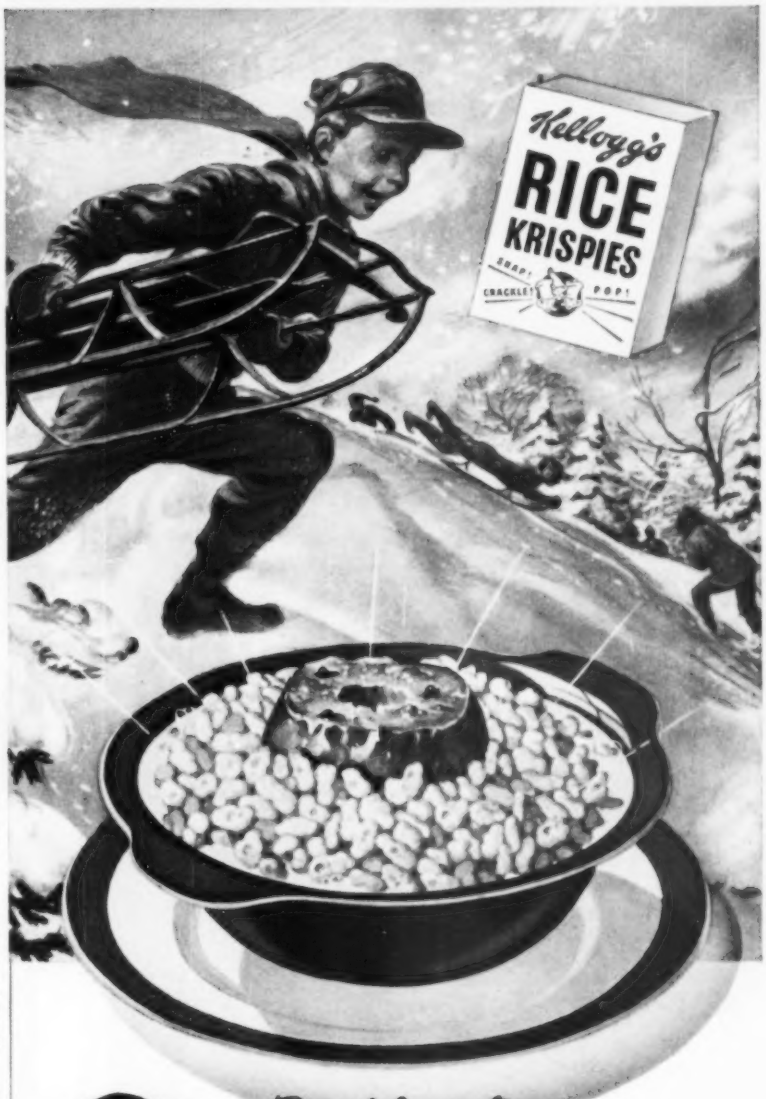
"I love my handsome Kellogg's 'Signature' Silverware, just received. A beautiful bargain!" writes Mrs. Earl T. Rowland of Santa Ana, Cal. Yes, start a silverware set with 4 teaspoons—each with your initial. Send only 75¢ and the end with white star from Kellogg's VARIETY PACKAGE. Center section of package gives details.

Do you have ideas about Kellogg's cereals? Do drop a note to Barbara B. Brooks, c/o Kellogg's, Box 303, Battle Creek, Mich.

"Rice Krispies" is a trademark. Reg. U. S. Pat. Off. of Kellogg Co. for its puffed rice.

A KRISPIE GOOD MORNIN'...

a barrel of fun in this breakfast main dish that goes snap! crackle! pop!



Breakfast Quiz

Q. Which assortment is the whiz?

A. KELLOGG'S VARIETY—Gives a pack of picking fun! Favorites here for everyone!

10-box choice, 7 cereal favorites

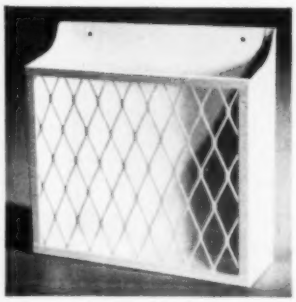
Kellogg's Mother Knows Best!

COPYRIGHT 1950, BY KELLOGG CO.

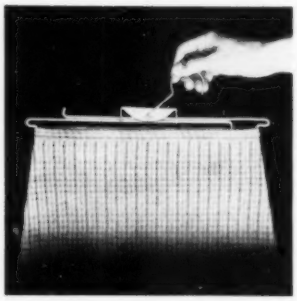
What's new in homemaking

[*From page 20*]

"Hook-on" hanger fits any door, back or front, holds garments, towels, lingerie. Aluminum ends hook over door edges. No permanent fastenings required. Spring bar extends to fit 24" to 34" doors. Doors open and close with hanger in place. Hook-on Screwless Hanger-Dryer, 59 cents, at stores or postpaid from *B-W Mfg., Inc., 721 N. Webster, Kokomo, Indiana.*



Gladrak belongs in every room. Use it as a magazine rack, or a place for newspapers and paper sacks in the kitchen, or for books and games. Of sheet metal, 12" x12"x24", in glossy white or dull, deep green in stores. Or $2.95 plus 30 cents mailing charge from *Gladys Lynn Designs, 7707 Cornell Avenue, Chicago 49, Illinois.*



Skirt-hanger smoothie—can be expanded to fit skirt sizes from 22" to 34". Skirt band is spread to full width. When hook is raised, it locks rods in desired position. When hook is down, the rods slide freely. Gift-boxed in sets of two, postpaid, $1. Available direct from *Frohock-Stewart Co., Harris Court, Worcester 8, Massachusetts.*

A tuffy broom that can really take it! Effective on any kind of floor surface, wet or dry. Bristles do not absorb water, yet the broom is most efficient in sweeping up water, snow. It is lightweight, can be kept sparkling with sudsing and rinsing. Bristles will not mat, break, or fade. Comes in gay colors of red, blue, yellow. Rubber bumpers on sides of broom protect woodwork and furniture. Metal handle is 47" long. You'll find the Empire Tuffy Broom in department, hardware, variety stores, and supermarkets priced at about $1.79.

A laundry hamper that is self-ventilating and self-emptying is the newest device to improve household efficiency. It measures 21½" wide, 22½" high, 5¼" deep; four screws install it on any door or wall. Put clothes in top, and on washday just touch your hand to the bottom of the hamper. Your laundry will automatically drop out without any reaching, yanking, or pulling. The Dor-O-Matic hamper is made by the *Pearl-Wick Corporation* and is available in all localities. It's priced at about $3.98.

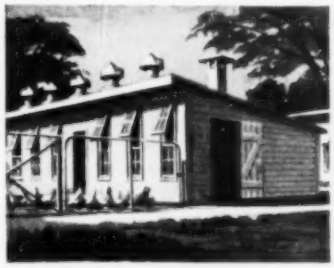
"Like mother's"— Your little "domestic" will love this waterproof kiddie apron. It comes in red-and-white or in blue-and-white polka dots. It has self-fabric cross straps, waist tie string, and utility pocket. Constructed for frequent tubbings, the fine-quality percale is backed with natural rubber. Sizes 4-6. In sizes 1-3, there's available a red- or blue-checked apron all $1 each. *Kleinert's, 485 6th Ave., New York City.*

How to get more profits and better living out of your farm

Just about the best-paying investment you can make on the farm is to modernize your buildings. You'll be amazed at the difference that more efficient insulation for dairy barns, poultry houses and other service buildings can make in production and profits. You'll be delighted to see how much more livable your home can be with a little remodeling. And with conditions still favorable, it's just smart business to take care of this important matter right now!

You can do a top job, *and save money too*—by using famous Celotex Building Products that perform several basic functions *at one low cost!* Stop in soon and let us prove how remodeling or building the thrifty Celotex way can make your farm more comfortable and more profitable. We'll be glad to discuss your complete building needs with you. No obligation, naturally!

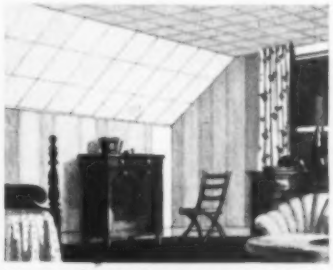
Your helpful Celotex Dealer



Step up egg and meat production by insulating laying and brooder houses with Celotex Insulating Building Board or Sheathing. Protects flock against drafts and sudden temperature changes. Strong, durable, low in cost.

Improve milk production by insulating dairy barns with sturdy Celotex Insulation Board. Makes possible better ventilation. Helps cows stay healthy, produce more by keeping barns warmer, drier in winter, cooler in summer.

Beautify your home with Celotex Insulating Sidings. Go on quickly over old exteriors. Add extra insulation that cuts fuel bills. Never need painting. Attractive stone, brick, and shingle patterns in modern colors.



Turn unused space into extra rooms with Celotex Insulating Interior Finishes. Ideal for beautifying old rooms, too. Quick, easy to install, and inexpensive. Variety of stunning colors and textures.

Insist on Genuine CELOTEX Building Products
REG. U. S. PAT. OFF.

The Celotex Corporation, Dept. SF-20, Chicago 3, Illinois

FREE! New Celotex booklet on how to insulate and modernize farm buildings for greater production and profits. Packed with practical, money-saving ideas. Check below for your copy.

☐ Send me free the new Celotex farm booklet.

Also send me free plans for
☐ 1-car garage ☐ 2-car garage

ALSO AVAILABLE—COMPLETE WORKING PLANS for modern, more efficient new farm buildings. Send $1.00 for each set of 17" x 22" plans you check below.

☐ Brooder House ☐ Laying House
☐ Milk House ☐ Tobacco Barn
☐ Dairy Barn (1-story, 20-cow)

NAME _____ ROUTE _____

POST OFFICE _____ COUNTY _____ STATE _____

Pat's mother spanks!

Pat spills crumbs all over the clean rug, and mother has to drag out the vacuum again. It makes her mad enough to spank!

Pete's mother doesn't!

Pete has crumb trouble, too . . . but his unruffled mother gets the mess quick, with her handy Bissell Sweeper. She saves her vacuum for heavy cleaning, uses her Bissell® for all quick daily clean-ups.

Only BISSELL has "BISCO-MATIC"* BRUSH ACTION

This miracle-action brush adjusts itself *automatically* to any rug thickness. Picks up every speck, even under beds, with *no* pressure on the handle. So easy on rugs, and *you!*

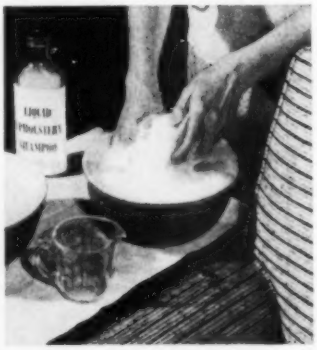
New Bissell Sweepers with "Bisco-matic" Brush Action as low as $6.45. Illustrated: The "Flight" at $9.45. Prices a little more in the West.

BISSELL SWEEPERS

Bissell Carpet Sweeper Company
Grand Rapids 2, Michigan

* Reg. U. S. Pat. Off. Bissell's full spring controlled brush.

How to shampoo upholstered furniture



1. Work up full bowl of rich, dry suds, as directed on the commercial shampoo you've selected. A sponge is best for applying suds

An upholstery shampoo will add a well-cared-for look to your living-room furniture. Daily and weekly vacuum care, along with instant spot removal, helps stave off the necessity for shampooing or regular commercial cleaning. But the time comes sooner or later when the upholstery looks tired and grimy.

Before starting to shampoo a piece of furniture, find out if soap and water are harmful to the fabric covering. Use dry suds or any good commercial upholstery cleaner on a small out-of-the-way spot to see if the colors run or the fabrics fade. You should also decide whether the upholstery is too badly soiled to clean evenly. In a case of this kind, it is wisest to have your pieces cleaned by an expert, who is equipped to do a successful job. **END**

2. Clean a small area at a time, rubbing the dry suds into the fabric with a circular motion. Avoid rings by overlapping areas

3. Rinse suds from fabric with fresh water and sponge. Avoid getting fabric too wet, but be sure suds are completely rinsed out

4. After upholstery is completely cleaned, let dry. Then renew luster of pile by pressing with warm iron over slightly damp cloth

5. Brush up nap after ironing with a medium-stiff brush. Again let dry thoroughly; then brush entire piece to get a uniform finish

I'm in Love

WITH THESE LUXURIOUS COMBED PERCALE SHEETS AT A PLAIN EVERYDAY PRICE!

It's love at first sight with these combed percale beauties! They're extra lustrous, extra sleek and smooth, extra long wearing. What makes them so fine? It's combing, the extra process that removes short, stubby fibres from the yarn and leaves only the costlier, finer, longer-staple cotton to be woven into the sheet.

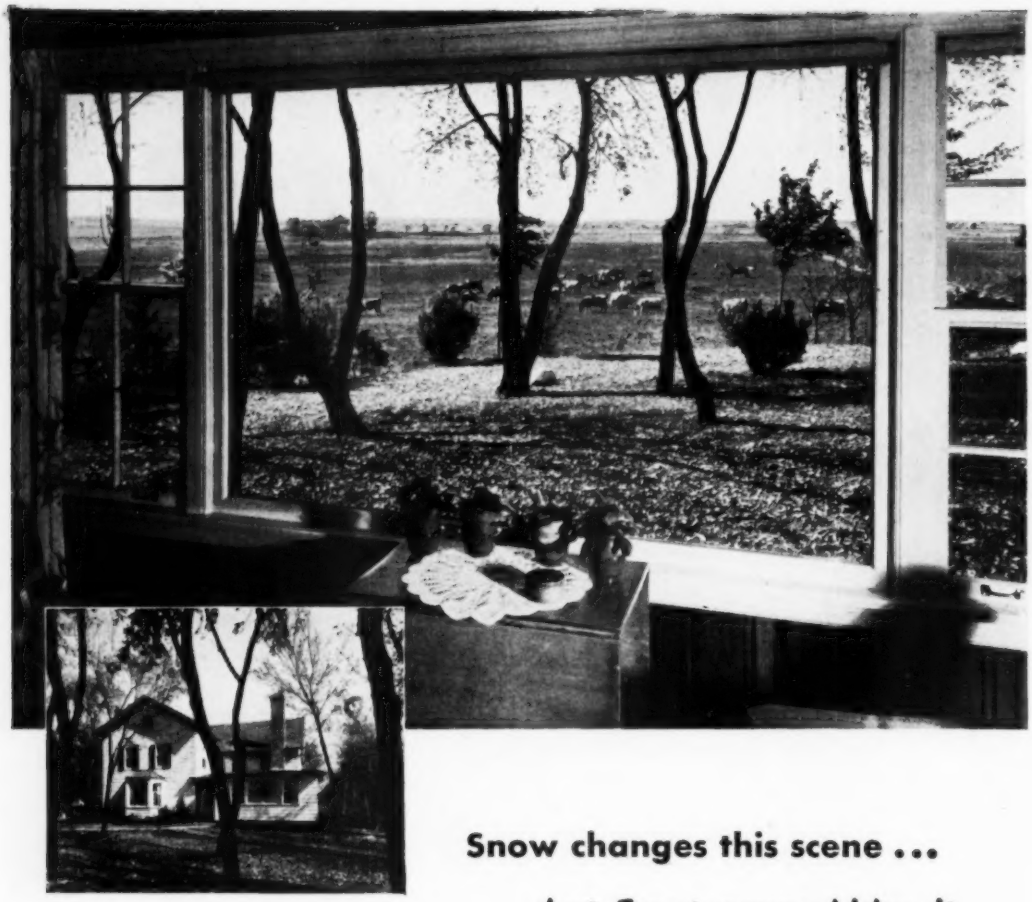
Colors gay as a butterfly's wing. These luxurious combed percales come in the dreamy pastels you adore —maize, pink, aqua, soft peach, rose, sky blue, as well as white. Colors are tubfast, and the sheets are airy-light. You'll save on laundry by the pound; find them easier to manage if you do yours at home. And they need practically no ironing! Ask for Pepperell Combed Percale Sheets at your favorite store today!

PEPPERELL MANUFACTURING COMPANY, BOSTON, MASSACHUSETTS

PEPPERELL FABRICS

PEPPERELL Combed Percale SHEETS

REMEMBER, PEPPERELL IS A PROMISE OF TOP QUALITY . . . IN FOUR FINE GRADES OF MUSLIN AND COMBED PERCALE SHEETS



Snow changes this scene ...

but Frost never hides it

During three cold winters, frost has never blocked out the view through this window in the G. W. Arny home, Du Page County, northern Illinois. It is glazed with *Thermopane** insulating glass.

Thermopane has a blanket of dry air sealed in tightly between two panes of glass. The warmer room-side surface of *Thermopane* stays clear when single windows are steamed and frosted. Even at zero you enjoy a clear view of the outdoors.

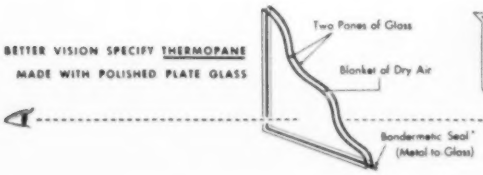
You can sit comfortably right next to *Thermopane* windows. No chilly feeling. The entire room stays warm with less fuel.

Thermopane stays in your windows . . . no storm sash to put up and take down, none to wash and store away. In summer it helps keep heat out, keeps rooms cooler.

For greater comfort, fuel saving and frost riddance, insulate your windows with *Thermopane*. It comes in more than 80 standard sizes for use in double hung, casement and picture windows, made of either wood or metal. Sold by glass and building supply distributors and dealers. For more information, write for our complete *Thermopane* book.

*®

FOR BETTER VISION SPECIFY THERMOPANE
MADE WITH POLISHED PLATE GLASS



Thermopane

MADE ONLY BY LIBBEY·OWENS·FORD GLASS COMPANY
3425 Nicholas Building, Toledo 3, Ohio

Odd cuts cooked good

By Blanche Campbell

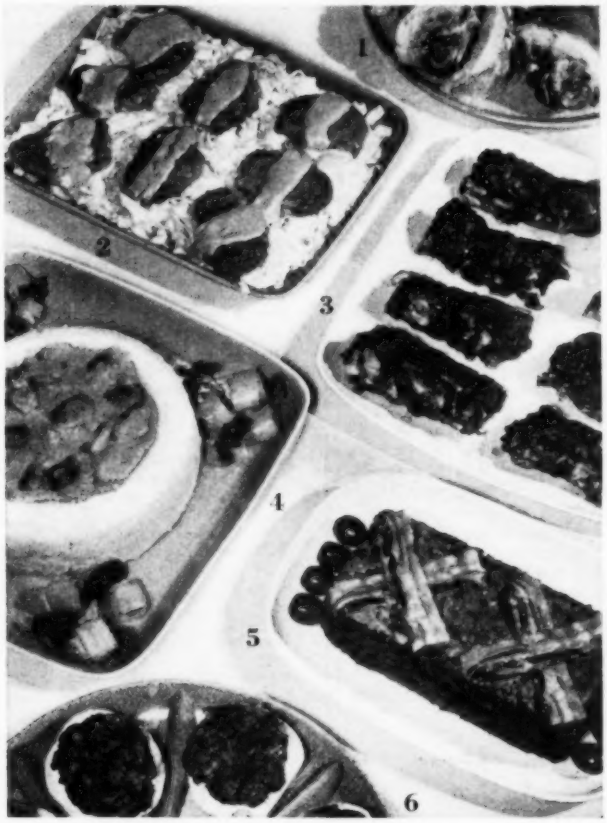
Perhaps you, too, are looking forward to that first whiff of tempting hickory smoke drifting from the smokehouse. Again it's the season for restocking the larder with freshly smoked, home-cured hams and big slabs of bacon.

Butchering day—if you still do your own—brings its quota of work. And, even if you don't do the actual butchering at home, there still remain what are too easily termed the "odds and ends." I hope you don't commit the awful crime of just disposing of them. Some of us fail to realize that these so-called odds and ends are served frequently as delicacies in many of the best eating places across the country.

Long ago I discovered the wonderful, tasty dishes one can develop from an "old backbone," pig knuckles, tongue, and pigs' feet. And from the heart? And brains? And even ears? Dishes that my family and friends rave about. Here are some of my favorite recipes:

Knuckles 'n' Cabbage
Serves 4

Simmer...4 pig knuckles
3 teaspoons salt
1 bay leaf
½ teaspoon peppercorn in
1 quart boiling water for 2 hours, or until tender
Add, during last 10 minutes of cooking time,
1 medium head cabbage, cut in wedges
1 teaspoon salt
Serve on hot platter. [*Turn to page 78*



1. Knuckles'n' Cabbage—real man's dish
2. Best Creamed Tenderloin!—a sure hit!
3. Barbecued Backbone—hot and spicy
4. Curried Tenderloin With Rice—good!
5. "Some-more" Liver Loaf—m-m tasty
6. Heartburgers—juicy and delicious!

VALUABLE COUPONS for you!
inside every package

NOW AT YOUR GROCERS

. . . SAVE MONEY!

Offered to acquaint more women with CLIMALENE the remarkable Cleanser and Soap-Saver

This great money-saving offer is made for the sole purpose of acquainting more women with the remarkable *extra cleaning power*—the unusual soap-saving power of CLIMALENE.

CLIMALENE, with soap or detergent, is wonderful for whiter, cleaner clothes. Colors bloom! It is grand, too, for *shining clean dishes* and pans—sparkling walls, woodwork, all painted surfaces. *It stops bathtub ring!*

CLIMALENE cleans all dairy equipment—milking machines, cream separators *lightning fast, easier.* In any water—hard or soft. It cuts grease, cleans away milk slime—no hard scrubbing or scouring!

Save money with CLIMALENE. Get sparkling cleanliness everywhere—plus coupons! The Climalene Co., Canton, Ohio.

50CM2

Always use the thrifty cleanser
CLIMALENE
In Laundry, Kitchen and Bath

THRIFTIEST THING YOU CAN ADD TO YOUR HOME!

You can live better and *still* be thrifty with a Crosley Freezer! Daily you'll find more ways to save . . . more benefits to enjoy! When prices are right you can buy well ahead of needs . . . you'll fix and freeze quantities of favorite dishes . . . pretty-up leftovers into money-saving *complete* meals . . . conserve money and time by taking far fewer trips to market. So convenient, too: freezing is way faster, easier and safer than canning. Any way you figure it, a Crosley Freezer will surely enrich your life—and save dollars!

Only a **CROSLEY FREEZER** GIVES YOU ALL THESE FEATURES

1. Fast-freezing section.
2. Extra convenient Shelvatrays for pies, cakes, and Ball Freezer Jars; baskets.
3. Temperature control and warning light.
4. Efficient and long life refrigerating unit with a 5-year guarantee.
5. Locking lid handle for safety.

Five beautiful models . . .

For small dwellings there's the Kitchen Freezer—lowest priced freezer in the world! Linoleum-covered flat top provides extra working surface. Then there are the beautiful Custom Home Freezers: CF-7 (capacity up to 252 lbs. of foods) . . . the Custom and De Luxe Freezers CF-12 and DF-12 (capacity up to 420 lbs.) . . . and for large families or general farm use the Custom Freezer CF-20 (capacity up to 700 lbs.). All these superb freezers carry 5-year warranty!

CROSLEY DIVISION AVCO MANUFACTURING

Cincinnati 25, Ohio

BETTER PRODUCTS FOR HAPPIER LIVING

HOME & FARM FREEZERS

SHELVADOR® REFRIGERATORS . . . ELECTRIC KITCHENS . . . SINKS . . . ELECTRIC DISPOSERS . . . ELECTRIC RANGES . ELECTRIC WATER HEATERS . STEEL CABINETS . RADIOS . RADIO PHONOGRAPHS . TELEVISION

and of course, they're electric! ®

Odd cuts cooked good

[*From page 77*

Best Creamed Tenderloin

Serves 6

Slice . . . . . **1 tenderloin** into 6 pieces
Season with
½ teaspoon salt
dash of pepper
Dredge in
2 tablespoons flour
Brown on both sides in
2 tablespoons bacon drippings in heavy skillet
Add . . . . . **1 cup sour cream**
Cover and simmer 30 minutes.
Serve over **hot noodles.**

Barbecued Backbone

Serves 8

Wipe . . . . **backbone** with a damp cloth
Cut it into 8 pieces.
Dust with **2 tablespoons flour**
Brown in **2 tablespoons fat**
Place in baking pan.
Combine and simmer 5 minutes:
1 cup minced onion
1 cup tomato catsup
⅔ cup water
3 tablespoons vinegar
2 tablespoons Worcestershire sauce
1 teaspoon salt
1 teaspoon paprika
1 teaspoon chili powder
½ teaspoon pepper
⅓ teaspoon cinnamon
¼ teaspoon ground cloves
Pour over backbone pieces.
Bake covered at 325° for 1½ hours.
Turn pieces after first 30 minutes; then baste frequently.

Curried Tenderloin With Rice

Serves 6

Dredge . . . **1 pound pork tenderloin** in
½ cup flour, seasoned with
1 teaspoon salt
⅛ teaspoon pepper
Brown tenderloin on all sides in
3 tablespoons fat
Remove tenderloins.
Brown lightly in fat from meat:
1 thinly sliced onion
Blend in . . **3 tablespoons flour**
½ teaspoon salt
1 teaspoon curry powder
Add . . . . . **2 cups milk**
Stir constantly until mixture thickens.
Cook 2 minutes.
Add . . . . . **browned tenderloin**
2 cups diced celery
Simmer, covered, about 45 minutes.
Cook in boiling water until tender:
⅔ cup rice
Serve meat mixture over rice or in center of a rice ring.

Heartburgers

Serves 8

Wash and clean
2 pork hearts
Remove fat, veins, and arteries.
Grind the hearts with
4 tablespoons chopped onion
Mix in . . . **½ cup soft, day-old bread cubes**
½ teaspoon salt
¼ teaspoon black pepper
Form into flat cakes.
Brown slowly on both sides in
3 tablespoons shortening, half of which is **butter**
Serve on **buttered, toasted buns.**

"Some-more" Liver Loaf
Serves 6

Grind together:
- **1 pound pork liver**
- **1 medium onion**
- **1 clove garlic**
- **4 bacon slices**

Mix in . . . **1 well-beaten egg**
- **1½ cups tiny soft bread cubes**
- **¾ teaspoon salt**
- **½ teaspoon black pepper**
- **¼ teaspoon powdered sage**
- **¼ cup catsup**
- **½ cup milk**

Shape into a loaf.
Place in greased 4x9x2½-inch pan.
Arrange bacon slices on top
Bake at 350° (moderate) for 1 hour.
Serve immediately.

Devil's Scrambled Eggs
Serves 4

Wash . . . . **1 pound pork brains** in warm water
Remove all membranes carefully.
Drain.
Melt . . . . **3 tablespoons butter** in a heavy skillet
Add the brains and **2 tablespoons chopped onion**
Simmer over low heat 20 minutes, stirring constantly until dry and fluffy.
Add . . . . . **4 slightly beaten eggs**
- **¼ teaspoon black pepper**
- **½ teaspoon salt**

Stir to combine thoroughly.
Cook until eggs are set.
Serve immediately.

Breaded Pigs' Feet
Serves 6

Scrape and wash several times
- **6 pigs' feet**

Place in a large kettle and cover with
- **2 quarts boiling water**

Add . . . . . **1 tablespoon salt**
Simmer 5 hours.
Split the cooked pigs' feet.
Sprinkle with
- **½ teaspoon salt**
- **dash of pepper**

Dip pieces in mixture of
- **1 well-beaten egg**
- **2 tablespoons water**

Dredge in **½ cup fine dry bread crumbs**
Fry in deep, moderately hot fat (375°) for 3 minutes.
Serve immediately.

Plain Good Stew
Serves 8

Cut backbone into 8 pieces
Place in large kettle and cover with
- **1½ quarts water**

Simmer 40 minutes.
Add . . . . . **2 cups diced potatoes**
- **1 cup diced onion**
- **1 cup diced carrots**
- **1 cup diced celery**
- **1 teaspoon salt**
- **½ teaspoon black pepper**

Simmer 20 minutes.
Add . . . . **2 cups diced turnips**
Simmer 30 minutes.
Serve hot with **brown bread.** END

Successful Farming pays $5 for each recipe published on the Successful Recipes pages. Write on only one side of paper, and write only one recipe to a page. We cannot return unused recipes.—Editors

FOR COOKING AT ITS EASY BEST!

Crosley

Model COD-0—with 2 marvelous ovens, allowing you to roast, broil and bake at the same time!

7 Heat Speeds (instead of 5) for the exact heat you want—and every unit with a *removable* reflector pan for easy cleaning! Automatic timer—signal lights—even a deep-well cooker that converts to an *extra* surface unit! A huge oven that takes the *biggest* turkey (or 2 ovens if you prefer)! Marvelous *smokeless* broiler—roomy storage drawers—self-adjusting heat-seal oven door!

Beautiful Chromium Hooded Lamp lights *inside* your pans! Beautiful "divided" or "cluster" top (seamless)—beautiful flush-to-the-wall fit because of Crosley's exclusive baseboard cutout! Yes, Crosley certainly has beauty as well as brains. No other range gives you all that Crosley does—it's the electric range *you want!*

SEE THE 7 SENSATIONAL 1950 MODELS NOW AT YOUR DEALER'S

Choice of "divided" or "cluster" top

EFFICIENCY . . . BEAUTY

Every Crosley Home Appliance is designed from the Woman's Angle—and of course, it's electric!

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Cincinnati 25, Ohio DIVISION

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Is your home heating plant as modern as the rest of your equipment?

If you're putting up with an old, troublesome heating plant these days, it's probably out of habit. After so many winters, all its drawbacks—poorly heated rooms, faulty operation, and high fuel bills—are now taken for granted. Why not modernize? Install a steady, dependable Waterbury. Make 1950 just the first of all the pleasant, really comfortable winters in store for you!

Waterbury

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There's a Waterbury for every size home and for any type fuel—gas, oil or coal. That means—wherever you live, whatever style home you have, there's a Waterbury for you. Send us the coupon below and learn what modern home heating can do for you.

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Please send me "Seven Steps to Indoor Comfort" and the complete folder of Waterbury units, also the name of my nearest Waterbury dealer.

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"It's What's Under the Casing that Counts"

Here's an automatic feed grinder

By M. W. Forth
University of Illinois

Will you be scooping corn into your hammer mill five years from now? Not if the automatic grinding system pictured below is developed successfully.

The system is the result of an idea three agricultural engineers worked out last summer. These men combined a few conveyor parts, an electrical jam relay, and a 5-hp motor and grinder into one of the slickest schemes ever developed with a small hammer mill. It looked so good to the Agricultural Engineering Department at the University of Illinois that further development work was started there.

The conveyor in the bottom of the wagon or corncrib is driven slowly by a $\frac{1}{4}$- or $\frac{1}{2}$-hp motor. This conveyor motor is controlled by a jam relay wired in series with the 5-hp motor on the grinder. So, when the grinder becomes overloaded, the control turns off the conveyor. When the current to the 5-hp motor drops to normal, indicating that the grinder has cleaned out, the conveyor motor is automatically started.

Sounds complicated? It really isn't. But don't start right out to build one tomorrow. There is still a lot of work to be done before you or your neighbor can hang up the scoop shovel and eat supper while feed is being ground. Tests, however, are now under way.

J. R. McAllister, near Waterman, Illinois, is grinding feed for 80 head of cattle with this setup. The grinder may look rather small for such a big herd, but Mr. McAllister reports that about $1\frac{1}{2}$ hours every day does the job.

The low cost of grinding is another big feature, besides the fact that this method ends the job of bringing the tractor out of the shed or field and belting it up to the mill.

So, if you are interested in this new idea, do some thinking on how it would fit into your chore plan. Would you need a wagon conveyor or a full-length drag in the sheller trench in your crib? Would the unit fit into your system of storing and feeding? There are a good many such questions yet to be answered. **END**

Here's the Big News in HAY

Ventilated Bales

NOW YOU CAN MAKE STILL BETTER HAY...

HIGHER in Quality

HIGHER in Feed Value

Greatest Advance Since the Slicer-Baler

- **VENTILATED ALL THE WAY THROUGH TO KEEP HAY RICHER, FRESHER**
- **WIRED-TIED FOR BETTER HANDLING, LOADING AND SHIPPING**
- **SLICED FOR EASY FEEDING**

3 Simple Steps

1

Cut hay early, when protein is high. Take 7-foot swaths, three acres an hour, with a Case tractor mower. The Trailer-Mower shown here hitches quickly to any modern tractor, makes neat square turns, works well on uneven ground. Case also makes full-mounted tractor mowers. All are built for extra long life.

2

Rake hay promptly, before leaves are bleached or dry enough to shatter. Case side-delivery rakes build high, narrow, fluffy windrows for fast air-curing with less exposure. Model shown has four reel-bars for clean raking, geared slow for gentle action at fast tractor speeds. Roller-bearing model available.

3

Bale immediately when hay is safe to store, with the Case Slicer-Baler. It's so low in price most any farmer can own it, so simple that boys operate it, so sturdy that upkeep is only a trifle. With auger feed and Bale Ventilator as regular equipment it's now more than ever the great value in balers.

● You can see at a glance how it helps you to get hay of the highest quality and feeding value when cooling, curing air circulates right through the center of every bale. Vitamins, minerals, proteins, other nutrients—all are saved more completely, kept more perfectly in the ventilated "bale that breathes."

All 1950 Case "NCM" Slicer-Balers are built with Bale Ventilator. Your Case dealer can install it on earlier machines of this model. See him about it now. And send the coupon for the full story on latest haying machines.

CASE

FIND OUT MORE ABOUT VENTILATED BALES

For full information, mark machines that interest you, write in margin others you need, mail to J. I. Case Co., Dept. B-77, Racine, Wis.

- ☐ Slicer-Baler
- ☐ Trailer-Mower
- ☐ Tractor Rake
- ☐ Heavy-Duty Baler
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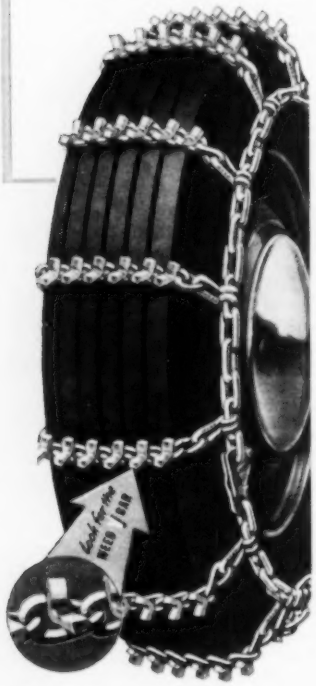
Remember . . . Drive Safely . . .
"The Life You Save May Be Your Own"
—NATIONAL SAFETY COUNCIL



ACCO *In Business for Your Safety*

AMERICAN CHAIN & CABLE COMPANY, INC.

Cows like to be vacuum-cleaned

Besides that, it pays in herd contentment and clean milk. This outfit doesn't just brush the dirt into the air—it sucks it all safely into the cleaner bag

By C. P. Fox

For more contented cows, the latest stunt is to vacuum-clean them.

This machine that does the job gives the currycomb some tough competition. It sucks dry skin particles, dust, loose hair, and even lice from a cow's hide, leaving it clean and glossy.

The electrically operated cleaner works well on all animals—pigs, horses, and even the family dog.

The cows love the vacuum cleaner. They lean into the nozzle, stretch their necks, roll their eyes, lay their ears back, and raise their legs. They're as happy as a pig whose back is being scratched.

I used the cleaner on cows at Hollyhock Farm, operated by Fred Grube at Oconomowoc, Wisconsin. The nozzle on the end of the hose has slits cut into the edge. These do two things: First, they prevent the nozzle's forming a solid suction on the hide; and second, as the nozzle moves back and forth over the hide, these slits in the aluminum nozzle act as a comb.

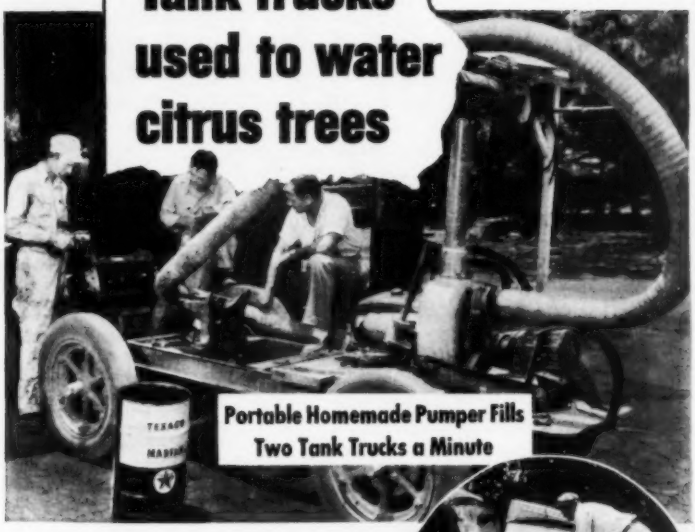
One cow on which I worked had her whole rear leg caked with dry manure. By running the nozzle over this area, with pressure on the nozzle, I was able to clean the hair until it actually shone.

The first time this cleaner is used on a herd, it is hard work. But if it's used once every two or three weeks, the herd-cleaning will go faster and easier. Mr. Grube has used the machine on his Jersey cows and bull, and on an Angus bull and Angus cows. In no case did any of the animals show any fear of the feel of the nozzle, or the sound of the motor. Quite to the contrary, they obviously loved it—as the photographs show. **END**

Nozzle is on the end of a long suction hose. Tank and motor stay out of stall

All the dirt is sucked into cleaner bag. With ordinary brushing, dirt flies around stable

Tank trucks used to water citrus trees



Portable Homemade Pumper Fills Two Tank Trucks a Minute

THE portable pumper shown above was built by Shop Foreman Arthur Strawn *(left)* and Mr. E. M. Goodwin *(center)*, of E. M. Goodwin, Inc., who operate a 1500-acre citrus grove near Mission, Texas. The pumper fills two 865-gallon tank trucks a minute.

Texaco Man Jackie Field *(above, right)* delivers Texaco Products to supply sixteen trucks, seven tractors, six stationary engines, four cars. Mr. Goodwin buys Texaco Marfak lubricant by the drum. Like keen ranchers and farmers the country over, he finds it sticks to bearings better, lasts longer and won't melt down and drip out, wash off, dry out or cake up.

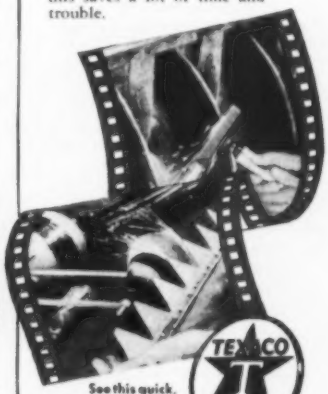
Havoline, the motor oil that keeps engines cleaner and better lubricated, goes into the crankcase of Mr. Goodwin's tank trucks. Mr. Goodwin is shown at left.

Marfak lubricant is the choice at the Huffman farm near Alvin, Illinois, because it forms a collar around the edges of open bearings, effectively sealing out grit and dirt. George and his brother Russell Huffman are applying Marfak as Texaco Man E. C. Woodrum, of Bismarck, Illinois, looks on.

Leading ranchers and farmers find *it pays to farm with Texaco Products.* Mr. Earl Sirmon *(right)*, prominent rice planter of Bay City, Texas, helps Texaco Man F. J. Milberger as he fills up Mr. Sirmon's tank with Fire-Chief, the gasoline with superior *"Fire-Power."*

● Will it pay you to modernize your workshop? Texaco's new full-color film "Your Farm Workshop" takes you into the shop of a successful farmer and shows you how he saves time and money in repairing his implements. This feature, plus other entertaining films and special door prizes, will be presented at Texaco Farm Meetings from coast to coast. See your local Texaco Man for time and place. Bring the whole family and enjoy yourself.

See how a power grinder like this saves a lot of time and trouble.



See this quick, easy way to sharpen the knives of your mower.

TUNE IN Metropolitan Opera broadcasts every Saturday afternoon. See newspaper for time and station.

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THE TEXAS COMPANY

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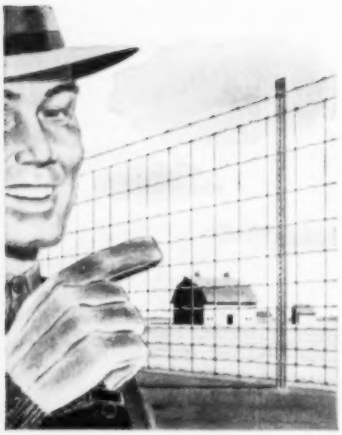
Texaco Petroleum Products are Manufactured and Distributed in Canada by McColl-Frontenac Oil Company Limited.



A Profitable Farming Fact:

RED BRAND FENCE

is GALVANNEALED for longer life

Red Brand gives you better fencing. It resists wear and *lasts longer every time* because it's galvannealed.

Galvannealing is the exclusive Keystone process that fuses zinc alloy to the strong steel wires of Red Brand Fence. In addition, the steel in Red Brand Fence contains copper for extra wear and rust resistance. That's why Red Brand outlasts ordinary wire fence.

Yes, on-the-farm use and laboratory testing have proved the superiority of Red Brand Fence and Red Top Steel Posts.

When you buy fencing, think of it as a tool for better farming. Insist on getting the most fence value for your money. Insist on Red Brand Fence.

HOW YOU CAN MAKE MORE MONEY ON YOUR FARM

If you're interested in boosting your crop yield and your farm income, let "Red" Brand on the radio tell you about the fast-acting Red Brand Practical Land Use Program. "Red" Brand tells you how farmers like yourself are making Practical Land Use pay big dividends. Check your local papers for the time and station—and ask your Red Brand dealer to tell you more about the Practical Land Use Program.

Listen to "Red" Brand's success stories about Practical Land Use Farmers. Broadcasts twice weekly over your nearby radio station.

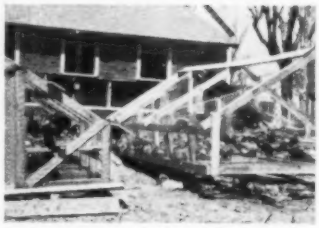
Keystone Steel & Wire Company
PEORIA 7, ILLINOIS

MAKERS OF RED BRAND FENCE • RED TOP STEEL POSTS • POULTRY NETTING • NON-CLIMBABLE FENCE • NAILS • BALE TIES • GATES

Boosts flock for profits

This Missouri family found that it paid to keep enough chickens to make them worth the bother. Here's how they kept down costs and saved labor

By H. M. Dail
University of Missouri



To handle larger flock, Mr. and Mrs. Heidbreder built new 20'x20' brooder (rear), used roofless range shelters for sun porches

Brooder house is divided through middle with wire netting to cut crowding. Behind Mrs. Heidbreder are roosts for chick training

Off they go to clean range. Roofs now have been added to shelters, previously used as sun porches. All but 40 cockerels removed

If a family decides to change its poultry enterprise from a small, haphazard, pin-money flock to a 300-plus layer unit, how much of a job is it? Also important, can this be done without a big outlay of cash?

Answers to these questions come from the experience of the G. H. Heidbreders of Moniteau County, Missouri. They faced such a situation and worked out a solution within a year on their 93-acre farm.

This family in 1948 raised only about 100 pullets, using old, time-consuming equipment and allowing their young chicks to grow up around the barns where other birds had been raised for many years. That fall they took a careful look at their records and found that their income from poultry did little more than pay for the feed. They decided that it was high time for a change.

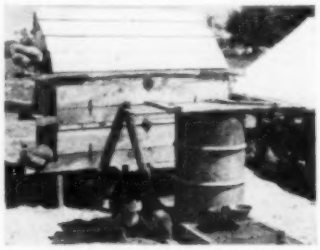
So, they started building a new 20'x20' brooder house (see top picture), with Mr. Heidbreder doing most of the carpentry work. He used native lumber for framing, covering this with composition material.

A concrete floor and plenty of windows on the south were other features of the building. Wire netting through the middle divided the house into two pens to help prevent crowding. The building went up for a cash cost of $300. As soon as it was completed, two electric brooders and a coal stove were installed.

The family ordered straight-run New Hampshire chicks from a high-producing strain, paying a few cents more for these better birds. When the 800 chicks arrived on March 1, the Heidbreders didn't sleep much the first night because of worrying about their new electric brooders. They had built the brooder house near their dwelling for convenience, and every

[*Turn to page 86*

Barrel waterer has a large capacity, saving time and work. Located on bluegrass-lespedeza range far from contaminated barnyards



A metal drum type of waterer is in the foreground, with colony laying unit behind, and one of the range shelters at extreme right

Farmer's "Workhorse"

Finer Than Ever For 1950

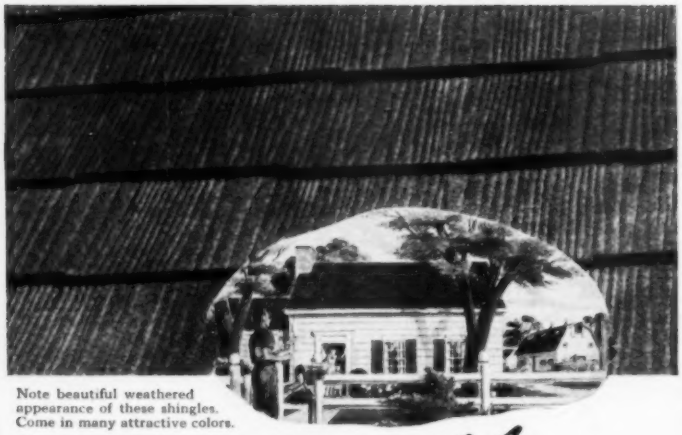
Famed in the farm field for years, new light-medium GMCs add to their renowned reputation with more power and comfort, more models and features, more real dollar-stretching value than ever before.

Newly designed camshafts, valves, carburetors and manifolds have increased the horsepower of all three engines in the line. Wider seats, more headroom, new sealing against dust and moisture, heat and cold, have increased the riding comfort of the cabs. New developments in brakes and springs . . . in various models . . . have increased chassis strength and stamina.

And new models, including the 1½-ton "280" series particularly suited to tough farm jobs, have increased the versatility and adaptability of the line to cover every light and medium duty farm hauling job.

GMC TRUCK & COACH DIVISION • GENERAL MOTORS CORPORATION

GMC
GASOLINE • DIESEL
TRUCKS



Note beautiful weathered appearance of these shingles. Come in many attractive colors.

the Most Beautiful low-cost Asbestos Roof

Johns-Manville has ever developed!

American Colonial—the asbestos shingle that lasts 40 years PLUS*

It's rotproof . . . fireproof . . . weatherproof. Permanent as stone! Not one has ever burned . . . not one has ever worn out!

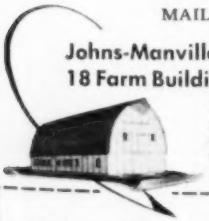
*Thousands of Johns-Manville Asbestos Shingles have now been in service 40 years and more. They're still as fireproof, rotproof, and weatherproof as the day they were applied. No signs they won't last another 40 years or more!

That's why we say, Johns-Manville Asbestos Shingles last 40 years Plus. They are outstandingly *better*, because they are made from materials that are practically *indestructible*—asbestos and cement. They are *rigid* shingles—permanent as stone.

The American Colonial Shingle illustrated above is not only beautiful and economical—it is easily applied by *any* carpenter on *any* farm building. Ask your J-M building material dealer to show samples.

MAIL COUPON FOR FREE BROCHURE

Johns-Manville offers special Plan Service for 18 Farm Buildings designed to give you best construction . . .



Up-to-date plans include latest recommendations of U. S. D. A. and State Agricultural Colleges. Drawings are 17 x 22 inches. Include exact specifications which you or your builder can easily follow. Cost only $1 per building. Use coupon to check plans you need, or to send for free brochure on J-M Asbestos Shingles.

JOHNS-MANVILLE, Dept. SF-2, Box 290, New York 16, N. Y.

☐ Send me a FREE copy of full-color brochure, "American Colonial Asbestos Shingles."
☐ I enclose $. . . . Please send me a complete set of drawings, 17" x 22", at $1 per set, for each building checked below:

☐ 2-Room Milk House
☐ Laying House
☐ Cattle Feeding Shed
☐ Small Airplane Hangar
☐ Milking Parlor & Milk House
☐ Machine Shed & Repair Shop
☐ Low-cost House
☐ 3-Bedroom Farm House
☐ Colony Hog House
☐ Portable Hog House
☐ Arched-Roof Brooder
☐ Multiple Poultry House
☐ Garage and Work Shop
☐ Roadside Market Stand
☐ 1-Story Dairy Barn
☐ 2-Story Dairy Barn
☐ All-Purpose Barn
☐ Tobacco Curing Barn

Name_____

Route_____ City_____

County_____ State_____

JM Johns-Manville BUILDING MATERIALS

Boosts flock for profits

[*From page 84*]

so often they would go out to check on the heat. But, after they found the brooders worked well, they lost no further sleep.

While the chicks were spending their first month in the brooder house, Mr. Heidbreder kept busy with hammer and saw making two range shelters (see top picture, page 84). He left the tops of these unfinished, placing fencing over them temporarily. He pulled them alongside his brooder house and built wire runways for the month-old chicks. These range shelters served as sun porches and gave added room for the birds.

A big day came near the last part of April when the family prepared to move their 8-weeks-old birds to range (see picture, page 84). At this time, they still had 790 of the original 800 chickens purchased. These had grown well and weighed from 2½ to 3 pounds each.

On that day, the cockerels were removed, except for 40 of the best which were kept because eggs were to be sold to a hatchery. The cockerels they sold more than paid the feed costs of the entire bunch up to that time.

By then, Mr. Heidbreder had nailed metal roofing on the range shelters. He shooed the 416 pullets and 40 cockerels into the two range shelters, closed the wire doors, and hitched his tractor to a range shelter. He pulled the two on their runners out to a field of bluegrass and lespedeza, a place where no birds had been for several years. Also moved out were some homemade feeders and barrel waterers (see bottom pictures, page 84).

As the birds grew rapidly on the pasture in their air-cooled homes, Mr. Heidbreder built still a third range shelter. He moved the shelters about as nearby pasture became short or tough, finally placing them near Sudan grass for the latter part of July and early August.

By the middle of July a few pullets had begun to lay, and a colony laying nest (see bottom-right picture, page 84) was built and moved out on range so that there would be little difficulty in finding and saving eggs. The pullets were fed corn late in the afternoon, and oystershell and water were always before them.

By the first of September, the flock reached 50-percent production. The pullets reached peak production when October, November, and December came along, these being the months when eggs usually sell at their highest price of the year.

> **A healthy and wholesome cheerfulness is not necessarily impossible to any occupation.** —*Mark Twain*

Mr. and Mrs. Heidbreder agreed that they had spent but little more time in raising their larger number of birds under the new plan than they had under the old. And they had more vigorous and better-laying pullets.

So pleased were they that now they plan to increase their poultry raising still further until they have 1,000 pullets to put in the laying house each fall. The flock will be the major source of income on the Heidbreder farm. **END**

New ensilage cart won't tip over

By E. S. Shepardson

Do you want an ensilage cart that will stand on its own feet—I mean wheels? Here it is!

Most carts fail in the running gear. Hard wheels do not roll easily. Bearings give out quickly in the inexpensive wheels. Many caster-wheel swivels no longer swivel with ease and the cart becomes hard to handle.

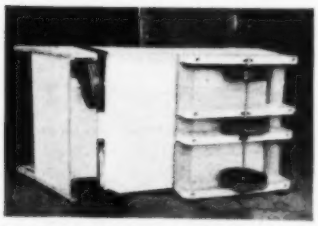
The wheels on this cart can "take it." They are referred to as "solid cushion" and "zero pressure" tires by some companies. Some are a sort of sponge rubber; others have a hollow center in which air is trapped. No inner tubes are needed.

The wheels and tires should be selected on the basis of the load they are likely to carry. They should not be less than 8 inches in diameter for easy rolling, and probably need not be more than 14 inches in diameter. The "zero pressure" type will roll easier than the solid type. Where five wheels are used, as in this cart, a 6-inch caster wheel probably would be ample.

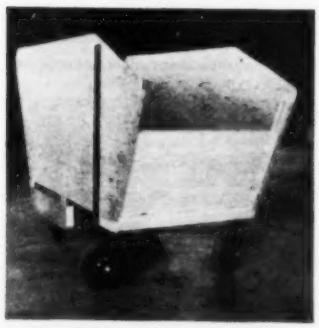
The five wheels are for stability. If one wheel drops over the edge of the manger or gutter, the cart will remain upright.

Wood is a good material for the box construction. It resists attack by silage acids. The box should have a tight bottom of 1-inch dressed material put together with matched joints. The sides and solid end may also be made of the same material or from $\frac{5}{8}$-inch to $\frac{3}{4}$-inch plywood.

All the wood should be painted with aluminum paint or linseed oil. END



Five wheels help make sure cart won't tip, even if some wheels drop over gutter edge



Bottom should be inch lumber, with matched joints. Sides can be plywood, well painted

FARM TIPS FROM SAM PHIPPS

"MY LIVESTOCK DESERVES EXPERT CARE"

"I've learned never to gamble with guessing when my stock is ailing. First sign of trouble I call in my friend, the Vet. He doesn't have to guess—he knows. Fact is, he makes a career of knowing."

"MY FAMILY'S SECURITY REQUIRES EXPERT PLANNING"

"After all, Sarah and the children would have a pretty tough time if anything happened to me and my life insurance wasn't planned just right. That's why I had the Mutual Life man help me draw up a sound, practical 'Insured Income' plan."

Sam, an expert farmer, respects men who are expert in *their* jobs. That's why, when planning his life insurance, he turned to The Mutual Life's professionally trained Field Underwriter in his neighborhood.

Our Field Underwriters know the economical ways to build a Mutual Life *Insured Income* program that will pay your family a monthly income and also take care of immediate expenses if you die. Or *Insured Income* will pay *you* a monthly income on which you can take things easy when the time comes.

So have a chat with the Mutual Life Field Underwriter when he calls. You'll find him cooperative and understanding.

FREE FARM ACCOUNT BOOK

Helps you budget your income for such essentials as life insurance. Send for a free copy of Sam's top grade Farm Account Book and keep records on important farm activities—livestock, crops, feeds, equipment costs, tax data, etc. Easy-to-follow instructions. Prepared by leading agricultural college, tested by practical farmers. Mail the coupon soon.

Insured Income

THE MUTUAL LIFE

INSURANCE COMPANY of NEW YORK

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I would like a copy of your FREE Farm Account Book—SF-17.

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HOME ADDRESS .....

COUNTY ..... STATE ..... NO. OF ACRES FARMED .....

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Let a John Deere-Van Brunt Field Cultivator sink its teeth into your fields to root out all weed pests that rob your crops of valuable plant food and moisture. You'll find either the Model "CC" or the integral No. 8 will do an unequalled job of weed control, seedbed preparation, pasture or alfalfa renovation, summer fallow work, and orchard or vineyard cultivation.

Work is easier with John Deere-Van Brunt Cultivators. Hydraulic power raises or lowers the No. 8; positive power lift or remote-cylinder hydraulic power controls the Model "CC." You'll find that either cultivator works close to fences and turns short for easy handling.

Individual tooth adjustment . . . variable tooth spacing . . . jackknife spring pressure for even penetration . . . easy depth regulation . . . and a full line of shovels to do better work on every job, are outstanding features.

Ask your John Deere dealer for a demonstration or write *today* for *free* descriptive folders.

JOHN DEERE
MOLINE, ILLINOIS

New device makes bricklaying easy

By Hans Dickinson

A new bricklaying device invented by Paul H. Sommers and John S. Hodgson, Montgomery, Alabama, makes the job of laying brick an easy one.

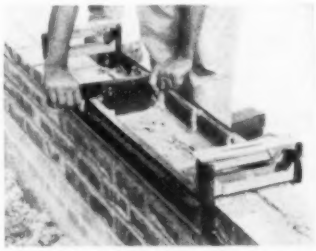
Using the bricklayer, anyone can lay brick, and it speeds up the job considerably. With the device, 8 to 12 bricks can be laid in quick succession. Built-in spirit levels on both the ends and sides of the bricklayer keep a constant plumb. The side-wall guides of the machine make it impossible to get out of line.

No plumb lines, string wall guides, or hand levels are needed. Guides on the inside walls of the laying frame direct the quick, accurate laying of each brick. A master mortar scoop beds eight bricks with one scoopful. The bricks are then placed by hand. A second scoop of mortar covers the bricks, and forward-and-back movement with an auxiliary screen smooths the mortar and grouts it deep into the joints.

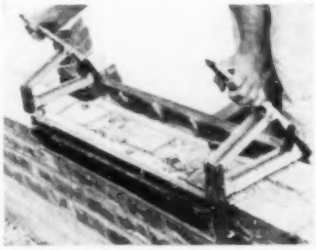
After this operation, the device is unclamped with one quick operation and shifted to the next position, where the operation is repeated.

The device speeds bricklaying three to four times its normal pace. It's simple to operate and can be used to build brick walls, silos, granaries, wells, walks, and houses. Circular models are available for building round silos or bins.

Quickly adjustable extensions span wall widths from 8″ to 13″. Any standard-sized brick can be used. Corners and openings are easily made true and plumb. Standard walls, hollow-wall construction—all types of brickwork—can be done with this bricklayer. **END**



Device is clamped in position, mortar poured



Bricks are laid, grouted, device unclamped

Farmer's Washington

[*From page 8*]

Stanford University Research Institute. Scientists are already using green algae, *chlorella*, to produce fats and proteins. They get a plant growth that doubles itself every day under proper conditions and can be made to yield more heavily of protein or fat by suitable changes in growing conditions.

The problem is to get all this into some kind of commercial or pilot-plant production. That is where the Carnegie Institution wants to help. Some of the artificial stuff has actually been used in canned soups and stews. But, as a competitor for beefsteak, it's a long way off.

Corn quota trouble? There is bad trouble for the Department of Agriculture in the sunny South over cotton quotas. Southern farmers claim their 1950 acreage is being cut too much. But agriculture officials don't think this will prove true in the corn country. They say corn acreage remained more stable during the war, while much cotton acreage was shifted to other crops in that period.

Many cotton farmers thus had a reduced historical production on which to base their 1950 acreage. Farmers in the same neighborhood were given widely different allotments. Some were cut as much as 80 percent. The second reason agriculture officials think there will be less trouble in the Midwest is that there promises to be no marketing quotas (in 1950), only acreage allotments on corn.

British peanuts. How does agriculture fare under British socialism? Don't press that question too hard on the next Englishman you meet. It is a sore subject for the Labor government.

The socialist planners in Whitehall dreamed up a magnificent scheme to solve the problem of providing the average Englishman with enough fats, by planting a huge acreage of peanuts in Tanganyika, one of the colonies in Africa. It looked fine on paper. But the cost and work of clearing the land was greatly underestimated.

Machinery broke down in the African soil. The tsetse fly ravaged animals and humans, and the peanuts rotted in the ground. The plan wound up in a colossal bust, just like some of the fancier plans dreamed up in the New Deal Department of Agriculture in the early thirties.

Wheat for Franco? Farmers and the farm vote are now all mixed up in the dispute over resuming full diplomatic relations with Franco Spain.

Junketing congressmen who were in Spain late last fall were greatly impressed by earnest Spaniards who told them how much their country needed cotton and wheat. Senator Elmer Thomas of Oklahoma, chairman of the Senate Agriculture Committee, was besieged by Spaniards telling him Spain needs cotton. Senator Ed Thye of Minnesota heard on every side how badly Spain needs wheat.

The result is that senators like Thomas and Thye are beginning to think that, Franco or no Franco, it would be a good idea to be on better terms with the Spanish government. This fits in very neatly with the ideas of American and British military men, who would like to have the help of Spain's army of "500,000 cutthroats" in case we need them. **END**

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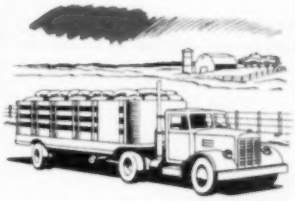
D-X and D-X Ethyl Motor Fuels, now catalytic cracked, give you smooth, knockless power and quick starts in cold weather.



D-X Heavy Duty Motor Oil and D-X Diesel Oil are top-flight lubricants for heavy-duty farm machinery and equipment.

Medicrude is a D-X petroleum specialty. It helps you prevent hog lice and sarcoptic mange. Ask your D-X Farm Serviceman.

Here's how you buy these better quality D-X Products . . . from the friendly D-X Farm Serviceman. If he's not making regular stops at your farm now, call the D-X Bulk Station nearest you and ask him to visit you on his very next trip.

FARM D-X SERVICE

MID-CONTINENT PETROLEUM CORPORATION
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Waterloo, Ia. Terre Haute, Ind. Omaha, Nebr. Minneapolis, Minn. Chicago, Ill.

WE TAKE A PATTERN

Accessories are magic

Be a quick-change artist with clever accessories. The smart little "extras" play tricks with your wardrobe. They can vary one garment a dozen ways.

The two-piece dress on this page suggests endless ideas: Set scatter pins button-fashion down the blouse front . . . make your own striking jewelry from ribbon and coins . . . wind the dress belt with a colorful scarf . . . clip a pair of earrings at the edge of your collar. And you've only begun. There's a world of possibilities.

We suggest you make this versatile dress in navy wool jersey (about $2.98 a yard) for around-the-clock wear.

Cost of the dress (Size 14): About $8 complete. *Fabric required:* 2⅝ yards of 54" wool jersey.

bright velveteen hat and bag

Alternate version of pattern blouse

smart pin and earrings

add a perky taffeta bib

hanky gives gay accent

Advance Pattern No. 5429 is available in sizes 12, 14, 16, 18, and 20 at your local store. Or send 50 cents in cash to the Advance Pattern Company, 331 East 38th Street, New York 16, New York. Be sure to include both pattern number and correct size.

For every woman who leads a double life

HUSTLE-BUSTLE YOU! Wrestling with pots and pans, sudsing clothes, helping with "chores." Every day your busy hands are in and out—in and out—of hot, soapy water. But you don't want them to get rough and red—for you've a *social* side to your life, as well!

HOSPITABLE YOU! With friends dropping in, company for dinner, club meetings to "hostess." You want your hands smooth—not dry or chapped. So you'll be beauty-wise to use Trushay—the "beforehand" lotion. Read below how it protects your hands *while you work!*

TRUSHAY... *the "beforehand" lotion... guards your hands even in hot, soapy water!*

HERE'S HAND CARE designed especially for *you!* You—and every woman living on a farm whose hands are busy daily with soap-and-water tasks.

Fragrant, velvety Trushay—a new and different idea in hand lotions.

A lotion so oil-rich, you apply it BEFORE doing dishes, light laundry, other daily washing jobs—and it guards your hands right *in* the hot, soapy water. Actually helps *prevent* its drying, chapping damage. Softens and smooths your hands *while you work!*

So don't let your daily household chores roughen your hands. Adopt Trushay's "beforehand" care today. And remember, Trushay leads a double life, too! It's marvelous "beforehand"—and it's a wonderful lotion to use *any* time. Keep a bottle in your bathroom, as well as in your kitchen.

Use Trushay as a skin softener, a body rub, a powder base. Smooth it on before you go out in wintry weather. It makes your skin much softer—and guards against painful, ugly chapping. Begin today to use Trushay!

TRUSHAY

THE "BEFOREHAND" LOTION

A PRODUCT OF BRISTOL-MYERS

To the man with—

40 TIRES (OR MORE) TO INFLATE!

Keeping tires inflated is no simple job—Experts say there are 40 on an 80-acre farm. With under-inflation cutting tire life short 25% and more, it pays to keep tires filled. It's easy to do with a Tokheim Air Compressor—to keep all of them at the right pressure all of the time. No back-breaking pumping. No extra trips to town. And the money you save will pay for your Tokheim in less than a year. See your implement dealer soon. Write factory today for *free* literature.

Many other uses:
- **GREASES** implements, cars, trucks and machinery
- **PAINTS** fences, buildings, screens, furniture, etc.
- **SPRAYS** DDT, animal sprays, insecticides
- **CLEANS, DUSTS** machinery and equipment

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#710 electric model. Gasoline engine models also available. Capacity 90 pounds. Built to last for years without service.

QUALITY TOKHEIM PORTABLE

AIR COMPRESSORS

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 30. Visit store nearest you for help with decorating problems.

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and Perfect Comfort — Complete Protection

WHEN THE WEATHER'S AT ITS WORST!

Whether it rains, snows or blows—you'll never have to worry about dangerous sill drafts or rain damage. You'll enjoy rainproof, draft-free, filtered-screen ventilation, day or night . . . in any season or weather. Solves your screen, storm sash and weather stripping problems forever . . . gives you year 'round benefits without final cost.

Write direct . . . or ask your Rusco man for full information and literature on the many exclusive features offered by Rusco.

The F. C. Russell Co.

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YOU'RE ALWAYS ONE STEP AHEAD OF THE WEATHER WITH *RUSCO*

SUPER-POWERED CHASSIS of extreme sensitivity . . . brings television programs to you — even in "fringe" areas — with supreme clarity and brilliance. Starrett "Opticlear" is America's most advanced receiver; in cabinets of the world's finest genuine top-grade woods. For free, private demonstration, write for your nearest Starrett dealer.

Starrett

Opticlear

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with exclusive scientifically FILM-FREED picture tube and built-in antenna.*

The JEFFERSON DAVIS giant 12½" tube Consolette $279.95

America's most complete line. $229.95 to $1295.00

Give wonderful parties! Have a glorious time! Send 10c for booklet, How to Give 21 Terrific Television Parties, to SFF

STARRETT TELEVISION CORP., 601 W. 26 St., N. Y. 1

More shelves

[*From page 67*]

Corner braces placed so the screw holes are 16 inches apart will match the wall studs in most homes. Locate the studs first by sounding or by following nailing already in the baseboards.

Sometimes you can hang shelves like this in the space between a doorframe and a window frame, fastening the sidepieces to the casings with screws.

Such a shelf unit will make an excellent shadow box for attractive figurines, if a decorative molding is used to edge the pine frame around the outside. Corners of the molding should then be mitered, of course, to give a professional-looking job.

If you plan to do quite a bit of picture framing, you may want to buy a regular frame miter box and saw. Otherwise, you can make a fairly satisfactory box from pieces of scrap wood.

For basement or garage. But even if you can't saw a straight line, you can still build shelves. Boards supported on loose stacks of bricks make shelves that hold a lot of things in basement or garage. Three stacks of bricks hold shelves up to 8 feet long without much sagging.

Even more decorative shelves for a basement recreation room can be built in this manner by painting the bricks in a bright color, with the shelves either painted or natural finish. **END**

Do you wish for a

BETTER

and

DIFFERENT

kind of job?

Then here's your chance in a service-sales job with *Successful Farming* that offers an opportunity of far-above-average earnings . . . plus the satisfaction of performing a service to the farmer and the community. Many of our representatives earn $5,000 a year and more!

To find out more about this job and the opportunities offered you, write to our Division Office below which is closest to your home. Give us a brief summary of your past history (farm background preferred but not necessary), the make and year of the car you own. If you qualify, a personal interview will be arranged.

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Art Schultz
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Michigan

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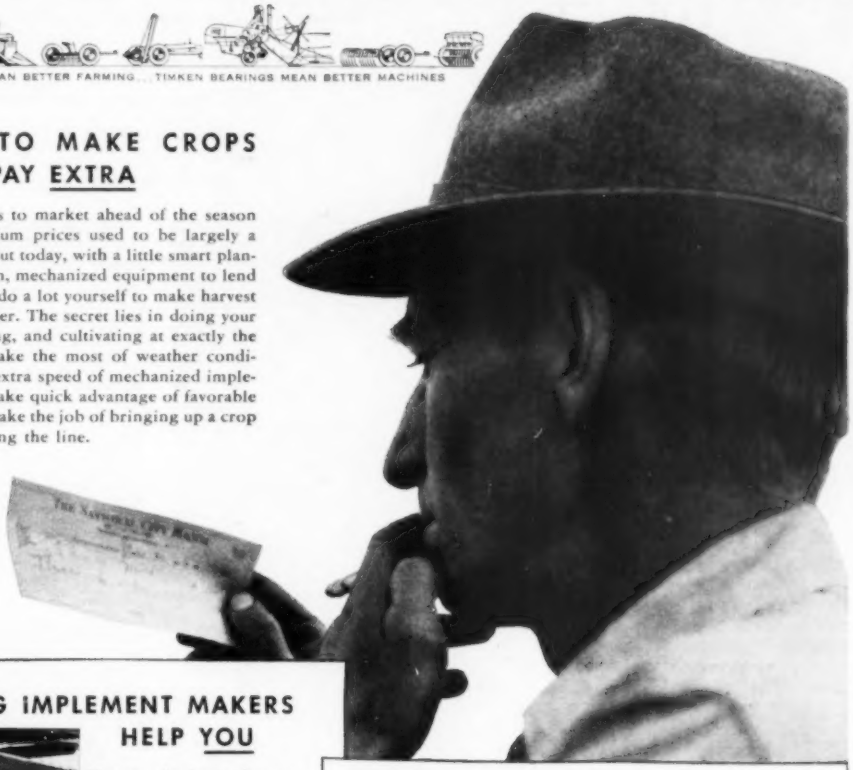
TIPS FROM THE TIMKEN ROLLER BEARING COMPANY ON

Making the most of MECHANIZED FARMING

BETTER MACHINES MEAN BETTER FARMING . . . TIMKEN BEARINGS MEAN BETTER MACHINES



1. HOW TO MAKE CROPS PAY EXTRA

Getting products to market ahead of the season to collect premium prices used to be largely a matter of luck. But today, with a little smart planning and modern, mechanized equipment to lend a hand, you can do a lot yourself to make harvest time come quicker. The secret lies in doing your plowing, planting, and cultivating at exactly the right time to make the most of weather conditions. With the extra speed of mechanized implements, you can take quick advantage of favorable conditions . . . make the job of bringing up a crop go faster all along the line.

2. HELPING IMPLEMENT MAKERS HELP YOU

Tractor wheels get a bumpy ride through mud and dust in this "merry-go-round" device developed by Timken* to test tractor bearings and seals. The Timken Company's vast research facilities are constantly being put to use by implement makers in developing tractors and implements to do a better job for you.

3. HEADWORK SAVES BACKWORK!

With ingenuity you can speed all kinds of extra jobs with your mechanized equipment. Gerald Patton, Newark, O., keeps pea vines from jamming his combine by cutting them loose with this coulter attachment. Last summer it helped him save 34 acres of sweet clover seed.

4. BE SURE YOU MAKE SURE

You get more value for your dollar when you buy implements equipped with Timken tapered roller bearings. Parts last longer—less chance of breakdown on the job. Lubrication is normally required only once a season. And Timken bearings let you tow implements at full tractor speed. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

Tapered Roller
TIMKEN BEARING
EQUIPPED

This symbol on a product means its bearings are the best. Look for it when you buy.

NOT JUST A BALL ◯ NOT JUST A ROLLER ⬭ THE TIMKEN TAPERED ROLLER ⬭ BEARING TAKES RADIAL AND THRUST LOADS OR ANY COMBINATION

What are you waiting for?

Don't be a die-hard on the subject of monthly protection

You certainly can't modernize your good-grooming habits if you just close your mind while others are getting the benefit of new ideas and discoveries. *It is no secret at this date* that Tampax has only one-ninth the bulk of the outside pad ...and needs no belts or pins to fasten it, because doctor-invented Tampax is worn *internally*. Also it causes no chafing, no odor and no bulges, bumps or ridges under a dress or skirt.

Tampax is made of safety-stitched absorbent cotton contained in dainty white disposable applicators. Your hands need not touch the Tampax and when it's in place the wearer cannot feel it. It's really the last word! Millions of women and girls now use Tampax in more than 75 countries—*and that's the truth.*

You can change Tampax quickly, dispose of it readily. Sold at drug and notion counters in 3 absorbencies: Regular, Super, Junior. Average month's supply slips into purse. Act now—prepare for *next* month. Tampax Incorporated, Palmer, Mass.

Accepted for Advertising by the Journal of the American Medical Association

Look what's underfoot

Cotton rugs are easy to handle, easy to launder, and easy to use. The new patterns can be had in almost any color choice, too

By Jean Power

A reversible rug in cotton is just the thing to rest tired feet under a kitchen sink. Being reversible, the rug will take twice the wear before laundering is necessary

A checkerboard design is formed by alternating high and low loops in the pile. Cotton rugs are ideal for bath, being absorbent, attractive, and easily washed

From the softest pastels to the most brilliant of hues, inexpensive cotton rugs now are available to add new interest to your home, and to cut the wear and tear of keeping house.

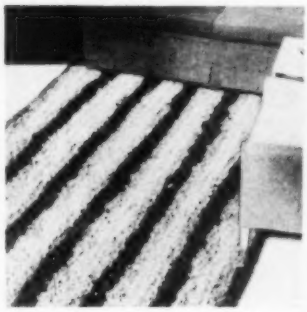
The variety of new patterns available makes them adaptable to every room in the house, too. In the kitchen near the sink, they'll help cushion feet during long hours of standing. In the bathroom, they'll take water drippings like a well-trained duckling. At the entry, muddy feet will come clean on their washable tufts.

In the living room, under the coffee table, under a desk, or in front of an often-used rocker, they'll protect your floors and carpets from hard wear.

Even the safety hazard has been eliminated in the majority of these new rugs, for special nonskid backings hold them firmly in place on every type of floor. The backings will last through many a laundry, and most of them can be replaced when worn out.

Laundering the new cottons is a comparative snap, too. Sizes up to 4 x 6 feet can be handled in your own washing machine easily. Larger room sizes may be done by your nearest laundry at very little expense. The daily cleaning of these soft-piled beauties also is a simple procedure. Even the room-sized cottons can be picked up and shaken outdoors at a moment's notice, for they're pliable, soft, and light in weight.

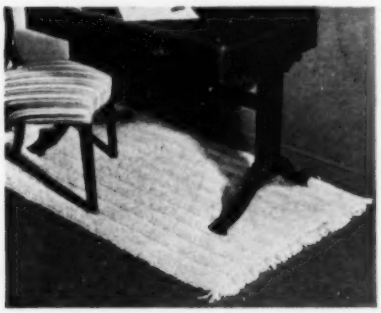
For quick "brushups" indoors, use a regular broom with a damp cloth tied over the bristles. Dirt particles will cling to the cloth, thus eliminating flying dust in the room. END



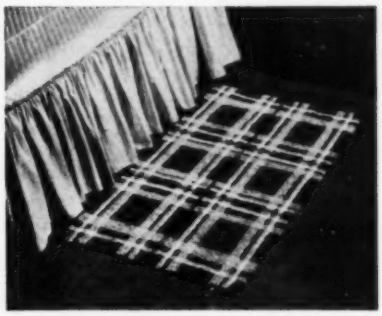
Bold stripes in 3 colors make this rug an unusual addition to any modern room. It's available in sizes up to 9'x12' and in a wide variety of new color combinations

Braided cotton rugs in solid and blended colors are available to highlight maple and provincial furnishings. They're ideal to protect present carpet, or to act as accents

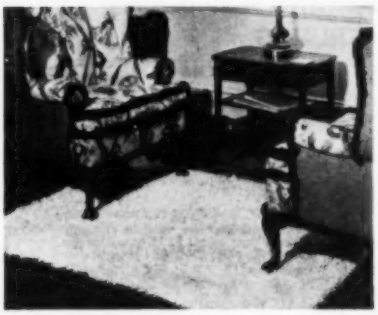
Reversible cotton chenille rug is unusual-looking because of deep ridges cut into the pile. Double thickness makes it ideal for the hard wear of kitchen, bath, or entries



A handsome, striped effect is achieved by alternating high and low loops in this scatter rug. It's the perfect type to highlight a prized piece of furniture. Comes in all sizes



Brilliant plaid pattern comes in all sizes. It's ideal for bedrooms, den, or even a modern living area. Price is low, as on all new cottons; value received is worth every penny



Long loops form the pile in this rich-looking rug, available in solid colors. Keep it soft and fluffy looking with daily brushing with a damp cloth tied over your broom

DON'T RISK SUCH DISASTER IN YOUR MARRIAGE

Because of one intimate neglect, a wife can crash to the depths of unhappiness

THIS unfortunate wife has only herself to blame, because she has been guilty of one unforgivable intimate neglect. This disaster need not have been . . . she could *so easily* have protected her married happiness. She could have done this simply by safeguarding her dainty allure with regular, *effective* vaginal douching—with a *scientifically correct* preparation such as "Lysol." Reliable "Lysol" assures *complete* feminine hygiene.

Germs destroyed swiftly

"Lysol" has amazing, *proved* power to kill germ-life on contact . . . truly cleanses the vaginal canal even in the presence of mucous matter. Thus "Lysol" *acts* in a way that makeshifts like soap, salt or soda *never can*.

Appealing daintiness is assured, because the very source of objectionable odors is eliminated.

Use whenever needed!

Yet gentle, non-caustic "Lysol" *will not harm* delicate tissue. Simple directions give correct douching solution. Many doctors advise their patients to douche regularly with "Lysol" brand disinfectant, just to insure daintiness alone, and to use it as often as they need it. No greasy aftereffect.

For feminine hygiene, three times more women use "Lysol" than any other liquid preparation. No other is more reliable. You, too, can rely on "Lysol" to help protect your married happiness . . . keep you desirable!

For complete Feminine Hygiene rely on . . .

"Lysol" Brand Disinfectant

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NEW! . . . FEMININE HYGIENE FACTS!

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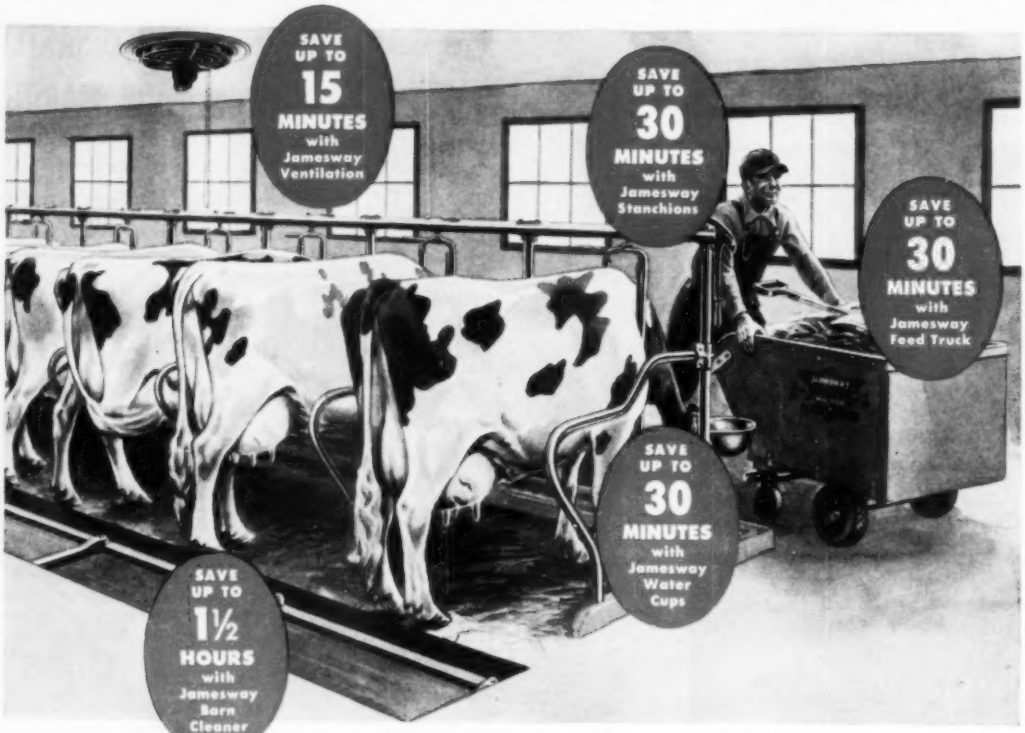
S.F.-502

SAVE UP TO 3 HOURS

OF HARD, BACK-BREAKING DRUDGERY EVERY DAY



NEW Jamesway Barn Cleaner does away with daily barn drudgery and saves time. Just flip the switch—it cleans your barn *cleaner.* Easy to install. Fits any gutter — any barn. No indoor pits or cross gutters to collect filth. Exclusive shuttle action. No gutter chains or corner sprockets to wear out or break. Sturdy drive unit sits outside . . . saves valuable stall space. Ask your Jamesway dealer for a free demonstration. You'll see why the Jamesway Barn Cleaner is the leader.

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ASK YOUR JAMESWAY DEALER FOR *FREE* PLANNING HELP BEFORE YOU BUILD, REMODEL OR EQUIP ANY FARM BUILDING

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See your Jamesway dealer now. He'll be glad to show you how little it costs to modernize and equip your barn. He'll even sit down and work out a plan, *tailor-made for you.* Take advantage of this personal planning service now. There's no obligation. For free literature that tells you how you can save time with dairy cows, poultry or hogs, mail coupon today.

World's Largest Makers of TIME-SAVING Equipment for Cows, Hens, Hogs

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Please send literature on items checked. Tell me how to get FREE plans for my needs. I plan to build or remodel:

Dairy Barn ☐ Hog House ☐ Poultry House ☐

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A hog house plan

that gives you the most for your money

This hog house was designed to let you build inexpensively and still have a building which would permit farrowing at any season of the year. Over-all dimensions are 24′x64′. The framework is of pole construction with an alternate of 4″x4″ posts and studs.

The sheltered feeding yard around the cribs can be built later or omitted. And if you want to leave off the pig doors and feeding floors along both sides of the house, you can get by fine by having sows farrow inside during cold weather, in portable houses during warm months.

If you decide to build it "as is," you'll notice that the roof of the house may be extended into the crib area to give further shelter. And you'll notice, on the plan set, that each 8′x8′ pen inside can be converted to an 8′x16′ pen by removing the portable sections.

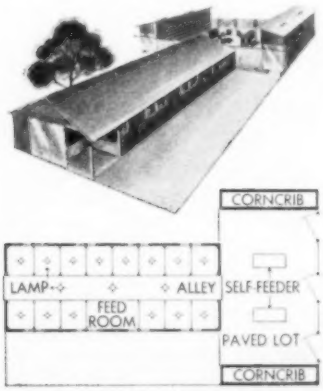
If you use pole construction, a fill of crushed limestone or evenly packed clay will serve for a floor. With such a setup, you'd probably use individual houses for summer farrowing.

Whether you use concrete, gravel, or clay, be sure the floor *inside* the house is a foot or more above the ground level outside, so as to keep moisture out.

Framework shown in the plans is the simple type of nailing girts and barn boards—with or without battens and with or without insulation boarding. Insulation could be applied to the girts just under the barn boards, providing it has a vapor seal.

The roof in the plans has an insulated ceiling. This must be used here if you want efficient performance. There is a ventilated loft into which three ceiling outlets discharge warm, moisture-carrying air. Such an arrangement will give you a cool house in summer and a warm one in winter.

A full-sized sheet of detailed construction drawings and a cost-finding list of materials will be sent to you postpaid for only $1. When ordering, please address *Successful Farming*, 1302 Meredith Building, Des Moines 3, Iowa. Be sure you ask for plan No. 49S04 when you order. **END**



High feed prices and incomplete rations can pick poultry profits right out of your pocket. But you can stop these two pickpockets if you use the grain grown on your own farm fortified with MURPHY'S VIG-O-RAY CONCENTRATE. By making full use of your farm-grown corn and oats, properly fortified, you can make more complete poultry mashes and save as much as $15.00 a ton.

MURPHY'S VIG-O-RAY CONCENTRATE supplies the extra protein, mineral and vitamin substances poultry need and farm grains do not supply. VIG-O-RAY CONCENTRATE provides those vital substances needed to balance up your corn and oats into more complete, efficient, low-cost poultry mashes. You cut feed costs, too, because you don't "buy back" grains that are no better than the corn and oats you have on hand—and you save high handling and freight charges on the grain you use.

Give your chicks an extra-good starting mash by mixing your farm grains with Murphy's Vig-O-Ray Concentrate. Here's a low-cost chick-starting mash that will give your chicks the feed essentials they need for good health and fast development. Just mix 250 lbs. MURPHY'S VIG-O-RAY CONCENTRATE with 200 lbs. ground wheat, 100 lbs. alfalfa meal, 100 lbs. ground oats and 350 lbs. ground yellow corn. This makes an efficient, complete starting mash that will save you many dollars on your feed bills this spring and get your chicks off to a fast start. Your Murphy Feed Dealer can make it for you, using your own grains, or you can make it yourself at home. Better **health**, **faster gains** and bigger **profits** from your poultry can be yours if you feed right.

Yes, cut down on high feed bills and get a *better* starting mash by using your own ground grain mixed with MURPHY'S VIG-O-RAY CONCENTRATE. See your Murphy Feed Dealer, or write for our Free Booklet, "Raising Better Poultry". Address your card to Murphy Products Co., Dept. A, Burlington, Wis.

HEART OF THE RATION

MURPHY'S CONCENTRATES

"Thought my back would break—till I used ABSORBINE JR."

says WILBUR F. BOECK, *Manager*
Rock Gate Farm
Bedford, New York

● "I'll never forget the day last winter I had to take a turn loading milk cans. Those 125-lb. cans seemed to weigh a ton. My back and arm muscles felt like they were tied in knots. Lucky for me my wife always keeps Absorbine Jr. handy, and at dinnertime I rubbed it on those sore spots. Talk about fast *relief!* It eased the pain so fast that I was downright surprised!"

Take a tip from Dairyman Boeck and get relief with Absorbine Jr. (1) It promptly cools and soothes sore muscles. (2) It counters the irritation that causes the pain with a grand muscle-relaxing effect that helps make you feel good all over.

Get Absorbine Jr. wherever drugs are sold . . . $1.25 a bottle . . . Introductory Size 15¢.

W. F. Young, Inc.
Springfield, Mass.

ABSORBINE JR.

Watch sows' housing and exercise

Neglect of these points can be costly later at farrowing time. Here are ideas which have helped others

By E. C. Miller
Purdue University

Ever step into a frozen-food locker on a hot, sticky summer afternoon? Just try to keep from shuddering as that frigid air makes your clothes turn clammy cold.

Many of us give our brood sows just that kind of treatment. Crawling out of a tight, steamy house on a frosty morning is not conducive to good health. Most veterinarians agree that undue exposure to cold and dampness due to improper housing is the main cause of the heavy loss that farmers suffer each year from the deadly flu virus. And flu among the brood sows certainly doesn't help the future pig crop.

Hints on housing

It is estimated that a sow will exhale about one-half gallon of water per night in just her breathing process. Thus, when we have 10 or 15 sows sleeping together in a tight house, it is little wonder that the roof is covered with frost and the bedding damp on a cold morning.

Proper ventilation. This is the first of six major points in the housing question. Proper ventilation will help to put a stop to dampness and respiratory troubles. This has been done in the 10'x12' house shown in the left-hand picture below. The house is tight on three sides and relatively open in front. Note how the free stream of air flowing into the 4'x6' opening can carry the moist air out through the opening between the rafters. This prevents dampness.

If the humidity is allowed to increase in a house, the hogs are covered with a dampness which causes them to be supercooled by the penetrating cold. Then you can expect to have real trouble.

Most farmers face the house to the south or southeast. By having the house tight in the rear and at least 12' deep, a pressure is built up within the house sufficient to stop most of the rain and snow from blowing very far into the opening.

This type of house has been in use at the Purdue Swine Farm for the past six years. It has given excellent results as a wintering shed for both sows and fattening hogs. Farmers throughout Indiana have adopted this type of structure with equally good results.

A firm believer in good ventilation and open-front sheds is Otto Orschell of Wayne County. Mr. Orschell farrows an average of 60 litters per year and is recognized as one of the leading Hoosier commercial hog producers. "Ott" said that when he started farming 21 years ago, he thought that hogs needed a tight house to sleep in.

"That idea is absolutely wrong," added Ott. "A hog can stand a lot of cold weather if you give him a dry, comfortable bed to sleep in."

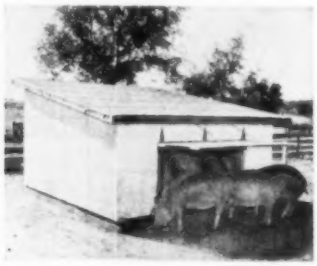
His 15 yearly farm account books prove that Mr. Orschell knows what he is talking about.

Ott winters his sows in a 14'x18' open-front shed and has three 14'x20' sheds for his fattening hogs. The sheds are built on runners with a 4' overhang to the roof.

No drafts. The second requirement, that the house be free from drafts, is as important as the first. Hogs, like most livestock and poultry, can stand a great deal of cold air, provided it is not in the form of a draft. By having the three sides of a hog house tight, including the part

[*Turn to page 100*

Air flows into the 4'x6' opening and out between the rafters of this sleeping shed



This 3'x6' door at rear can be raised in summer for extra shade and ventilation

Which Farmer Has the Most Telephone Service?

U. S. FARMER

SWEDISH FARMER

NEW ZEALAND FARMER

FRENCH FARMER

NORWEGIAN FARMER

AUSTRALIAN FARMER

DANISH FARMER

SWISS FARMER

THE answer is, of course, the American farmer. A larger proportion of the farmers here in the United States have telephones than in any other country.

A record-breaking performance by the Bell System since 1945 has resulted in the addition of 1,300,000 telephones in rural areas. To accomplish this, we strung 615,000 miles of wire, built 100,000 miles of pole line, and invested $350,000,000.

We've also made good progress in improving service. The number of families on a line is being reduced. The customer hears the rings of fewer parties on his line. New-type telephones are going in every day.

Our rural telephone job is moving steadily ahead—progress is truly remarkable.

BELL TELEPHONE SYSTEM

Why your feet keep on the job with U. S. ROYAL TEMPERED RUBBER

UNITED STATES RUBBER COMPANY
Serving Through Science
ROCKEFELLER CENTER, NEW YORK

Watch sows' housing and exercise

[*From page 98*]

between the rafters in the back, drafts cease to exist.

Make houses portable. The third requirement is not a "must," but having portable sleeping sheds has a great many advantages. One important advantage is that the fields which can't be reached from the permanent buildings can then be pastured.

L. L. Stewart, a Clinton County hog producer, pulls his hog sheds out onto a bluegrass sod during the winter. By walking about 40 rods, the sows have their choice of three cornfields.

Use dry bedding. The fourth requirement for healthful sleeping quarters is that they be properly bedded.

Mark Congleton, Clinton County farmer, says, "Eight or 10 inches of corncobs is mighty hard to beat when it comes to keeping hog beds dry. I use them just as they come from the sheller. They are usually crushed just enough so they will absorb a lot of moisture without any additional grinding."

According to Mark, his big problem is getting enough cobs, now that his neighbors have hit on the same idea.

Most farmers use a base of cobs and cover them with straw. As the straw becomes pulverized, more is added. This eliminates the weekly job of hauling out wet bedding.

A Tippecanoe County farmer makes use of his first-cutting alfalfa, along with cobs, to bed his sows. He finds that the stems last longer than straw and also give the sows some green pickings.

Want flexible use. The fifth requirement is that houses be usable throughout the year. Because of the high overhead cost, few farmers can afford to have buildings in use only one season out of the year.

The Purdue 10'x12' sleeping shed is designed to serve as a summer shade (see right-hand picture, page 98) as well as winter sleeping quarters. A 6' door across the back is hinged at the top for extra shade and ventilation in the summer.

The house also can be used for sheltering sows and pigs. As the pigs become 2 or 3 weeks old and are large enough to be turned together, three or four sows and their litters can be comfortably housed together in the shed.

Are floors needed? Going to build a new sleeping shed? Then you had better take the advice of these good hog men as to whether or not to put in a floor.

"It costs a lot of money to build hog houses these days," says Lee Crawford of Wayne County. "I want mine to last a long time. I believe the floors give them added strength to take the beating they get from being pulled around."

Frank Carson lives on a good, rolling livestock farm in Union County. "My hogs prefer to sleep on the ground," reports Frank. "If I put two houses out in the same field—one with and one without a floor—they'll crowd in the one without a floor every time."

Says L. L. Stewart, "Maybe those fellows on the rolling ground can get by without floors, but here on the prairie we have to keep them out of the mud."

Aaron Worl of Wayne County looks at it from the laborsaving angle. "I never put floors in my houses," he says. "Eight or 10 inches of cobs will seal out most of the water. If the beds get damp, I just add more cobs. Then, when my houses need cleaning, all I have to do is hook on and pull them to a clean spot."

There is no doubt but what both ways work. If your ground lies right for good natural drainage, maybe you'll want to try houses without floors. Otherwise, you had better spend a little more money and put them in.

Make them exercise

But good shelter isn't all that brood sows need during the winter. There's that matter of exercise, and you'll find little disagreement among breeders as to its value for breeding animals.

The amount of exercise taken by the sow during the gestation period seems to have some bearing on the strength and vigor of her pigs at birth and her ability to farrow easily.

Breeders have devised various ways of forcing their sows to take exercise during the winter months. The common method is to place the shelter 20 or 30 rods from the feed.

Another method is to sow a winter pasture crop, such as Balbo rye, winter barley, ryegrass, or birdsfoot trefoil in one of the back fields away from the buildings. The desire for green roughage usually will lure the sows regardless of weather.

L. L. Stewart, like most farmers, has several fields of corn to glean during the winter months. Stewart believes this is a good job for his 50 to 60 brood sows. His adage, "No walkie, no eatie," pays dividends, for his record of 265 pigs weaned from 27 sows is a hard one to beat.

"I wouldn't give a nickel for a brood sow that has been cooped up in a barn all winter," continued Stewart. "There just isn't any substitute for good exercise when it comes to raising strong pigs."

Using cornfields is an excellent method of forcing exercise, but care must be taken to see that the corn ration is properly supplemented with protein, vitamins, and minerals.

Some good hog raisers scatter a small quantity of shelled corn or whole oats on the ground. Sows will walk around for considerable time in search of the last kernel.

Regardless of the methods used, our brood sows must have good housing and enough exercise if they are to produce the kind of litters we are looking for. **END**

Increased Milk Flow

WITH REDUCED FEEDING COSTS!

Year-'round "green pasture" for modern dairymen! To provide feed equal to fresh, green pasture all year, profit-minded dairymen are turning to grass farming methods. The most modern aids to successful grass farming . . . for increased milk flow, are Martin Steel-Bilt Haymakers and Silos. Scientific Martin methods retain the milk-stimulating factor of fresh, green grass, enable you to plan a high-profit feeding program all year long.

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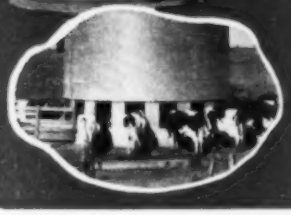
MARTIN HAYMAKER

For years, Martin Haymakers have been producing higher profits with rich GREEN hay all year. Profit-wise dairymen know the famous Martin method, forced air curing of freshly cut hay, retains all the food value of young grass . . . increases production of milk with "Spring-Pasture" feeding. Field losses are eliminated because all young leaves are saved and stored . . . for food. Martin hay is dust-free, mold-free, FRESH! Send coupon for full details!

I. M. DeWese, Weston, Ohio, says: "I noticed increase in milk production and 4 points in milk test when I started feeding out of my Martin Haymaker."



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A NEW IDEA! No carting, no pitchfork labor. Cows come to the Haymaker, eat GREEN hay cafeteria style. Send coupon for details.

Allan McComb, Bonniehead Farm, Maryville, Tenn., says: "I save hours of time every day because I never use a pitchfork to feed my cows."

Reduce your feed costs with a modern

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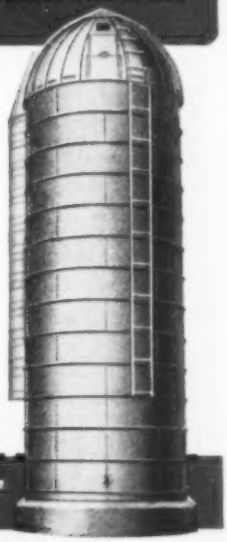

Your dairy profits will hit new highs when you feed rich silage produced the Martin way. Scientific fermentation assures finest grass or corn silage with fragrant odor, rich color . . . and no spoilage. Feed costs go down because nutritious Martin silage reduces the need for grain feeding. Air-tight walls retain juices, prevent drying out—will withstand heaviest pressures of grass silage. Send coupon for profit-making facts!

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How to prune

for more grapes and berries

Have more good eating, pleasure, and profit from your small fruits and berries, in seasons to come, by applying the following pruning tips this month

By William Ward

Old-timers in the art of pruning say "There's something very final about the cuttin' of a limb, for no amount of sighin' will put it back agin." So try these easy ways to prune grapes and other small fruits:

Grapes, when first planted, are cut back to the second bud. The growth the first season comes from these buds. The following February or March is the time for the first pruning. Every year (after the third year), the grapes are pruned down to four new canes or arms stemming from the main trunk, because only new wood produces grapes. This method of training is the 4-cane Kniffin System.

Pick the longest and strongest cane for the trunk. A common fault is to leave three or four canes, reducing the strength of the main trunk. Following are year-by-year suggestions for pruning:

First year: Cut back a strong cane to the lower wire. The dotted line in drawing A below shows you how a vigorous cane might be trained. Tie the cane loosely to allow for growth. This will be your trunk cane. Remove all other growth from the stem.

Second year: Train two canes (drawing B) along the lower wire and cut them back to four or five buds. Tie another vigorous cane to the top wire and bend it to follow the wire to the right or left; cut it back to four or five buds. Cut back all other growth from the stem.

Third year: Growth should be plentiful, and you can select one fruiting cane arising from each of the three permanent arms for this year's fruiting canes (drawing C). A fourth cane should be selected from the canes near the top wire. This fourth cane will develop into the fourth arm. Then choose three additional canes and cut each back to two buds. (See canes as cut back, drawing C.) These cut-back canes will be your renewal spurs and will be the fruiting canes for the fourth year. Prune other growth.

Fourth year: The permanent framework of the vine with its trunk and four arms is now established (drawing D). Pruning consists of cutting off all growth from the stem excepting the four fruiting canes, each having 10 to 15 buds, and four canes cut back to two buds for renewal spurs. See drawing D. These renewal spurs will provide the fruiting canes for the fifth year. For succeeding years, prune as drawing D indicates.

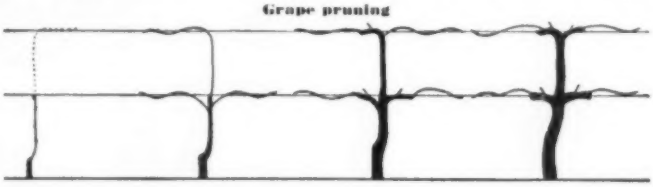
Red raspberries: This spring, when there's no more danger of winter injury, get out the V-shaped brush hook or the long-handled pruning shears and prune the upper fourth of the canes. *Never* do this during the growing season. If you do, you will have weak side shoots and an increased number of suckers, hindering berry production. And you'll have weak branches that will be more susceptible to winter injury. Remove the weak and winterkilled canes and thin the good canes so they are 6 to 9 inches apart. Red raspberry canes complete their growth in height the first season, bear fruit the second, then die. So after harvesting the berries, cut out the canes that bore fruit, to make room for new growth.

Black raspberries: Remove weak canes and head back the fruiting laterals after you are sure that all danger of winter injury is past. To reduce the amount of fruiting wood still more, shorten the laterals rather than reduce the number of strong canes. Cutting the laterals to a length of from 10 to 14 inches brings the best results.

About June, pinch off the tops of the shoots as they reach an approximate height of 24 inches. This will reduce upward growth and will cause lateral growth. The fruit will be borne on this lateral growth the following season.

If you didn't pinch off the tips last summer, the best thing to do this spring is to cut back the canes to about 4 feet and cut back the laterals to 10 to 14 inches. Support them with a stake or trellis. END

Grape pruning



First year A | Second year B | Third year C | Fourth year D

I CALL THIS A 'JAM SESSION' -SAYS MRS. TOM ALLEN

"When we speak of a jam session, we actually mean making jam or canning," says Mrs. Allen of Georgia. "By calling it that it sounds more like fun than hard work.

"And, naturally, I do anything to make light of hard work, because there's plenty of it on the farm.

"But no matter how hard the work is, even during canning season, I make sure my hands stay soft, smooth and nice-looking. Jergens Lotion takes care of that for me."

"I'll soon have a 'corn-husking' party," says Mrs. Allen, "for just the family and me. Often, we husk a hinful! I need Jergens Lotion after that, to help prevent chapping and roughness." Being a liquid, Jergens quickly furnishes softening moisture thirsty skin needs.

"I don't have to pretend fishing is fun," says Mrs. Allen. "It's a pleasure the whole family shares—like my Jergens Lotion. We all want soft, smooth hands." Jergens is only 10¢ to $1.00, plus tax. Never oily or sticky.

"I tend my looks with Jergens Lotion. It gives hands beauty treatments." To soften, a lotion or hand cream should be absorbed by upper layers of skin. Jergens contains *quickly-absorbed* ingredients doctors recommend—no heavy oils that merely *coat skin*. Proof? Water won't "bead" on a hand smoothed with Jergens, as with a lotion or cream that leaves an oily film.

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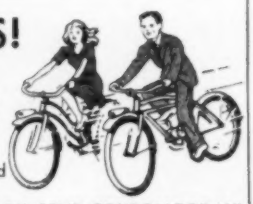

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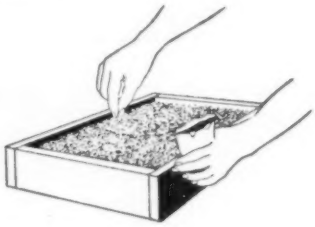
February garden tips

Seed catalogs, a few warm days...you can't wait until spring? Here's what you can do now to hurry things along

Though it's 20 degrees below outside, it's spring in the house when you decorate with forced branches of spring-flowering shrubs. Anything with leaf or flower buds and an interesting shape makes a good subject.

Cut and bring in the branches the first time the weather permits. Store in water until you want them. When you need an arrangement, immerse the branches completely in warm water for an hour. Then arrange them in a vase of water in a warm room. The buds will soon burst into bloom.



For earlier flowers and vegetables this spring, plan to sow seeds inside in flats. You can start now to make the containers—shallow, rectangular, wooden boxes are best. Make them 3 to 3½ inches deep with openings between the bottom slats for good drainage. Sow seeds in rows in good garden soil.

For better results, sow the seeds in a layer of vermiculite from your local seed store. Put a layer of soil in the box. Add a layer of vermiculite. Scatter the seeds and cover to usual depth with more vermiculite. Water from bottom up.

Don't sow the seeds too early, though, or the plants will be stunted waiting to be set outdoors. As a rule, plant them 6 weeks before your first frost-free date.

In anticipation of the first spring-flowering bulbs, force lily-of-the-valley pips to bloom indoors. Plant the pips (bulbs) in a pot with the tops just bursting from the soil. Wet the soil slightly and keep moist at 80 degrees for a week. Then move to a cool, dark place until well rooted. When strong roots have been formed, bring them once more to the light. Be sure the root tips have been frozen before you start forcing, or the plants won't flower. Other bulbs, such as

crocus, don't need to be frozen. Just plant them, set them in a sunny window, and watch them grow and bloom.

Don't get so deep in the seed catalogs that you forget your house plants. Keep them in trim with a complete fertilizer in water about every two weeks. Do not feed dry or dormant plants.

There is a wide choice of fertilizers for house plants. Good, homemade fertilizers, prepared in liquid form, are available around any farm. Or, if you prefer, use commercial plant food. Either kind of fertilizer is effective in promoting growth of house plants.

For very early bloom, you can start asters in the house. Plant the seed in flats in late February. Transplant the seedlings to a larger container when the roots fill the flat. Do this at least twice before setting them out in the garden in April. If you have heavy frosts later than April, it may be better to start the seeds in early April instead.

You who live where the ground will thaw this month can seed the bare spots in the lawn. It works better to sow the seed while the ground is still frozen. At the same time, feed the lawn 4 pounds of plant food for each 100 square feet.

The first day the temperature reaches 50 degrees, an oil spray for scale control can be given to dormant deciduous fruit trees and shrubs. Protect nearby evergreens from drifting spray.

If you just can't wait until the soil is workable, sow larkspur, snapdragon, and petunia seeds on frozen ground as you would grass seed. The alternate freezing and thawing will bury the seed. You'll have blossoms earlier that way.

For a mass of blue in early spring, sow blue larkspur in a bank behind violets and blue flax. Petunias look nice in a bed. Plant patches of red petunias among your favorite white and blue flowers for a patriotic grouping.

Things really will be humming in another month or so. No time to run down lost seeds or buy new ones. Check now to see that you have enough. Test germination of those left over from last year, if you feel you must use them.

Germination may be tested easily in the kitchen. Moisten a paper towel or blotter. On it place about 10 seeds if they are large, 25 if they are small. Keep them in the kitchen between two plates where they will stay warm and moist. If the seeds show strong germination, go ahead and plant them. END

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GURNEY Seed & Nursery Co., 815 Page St., Yankton, S.D.

How to plan a good-eating garden

[*From page 47*]

to serve them twice a week. Therefore, we know we shall need 64 pints of canned peas or 64 packages of frozen peas, or enough of each for 64 meals.

The basic recommendations for an adequate diet state that one vegetable daily should be green and leafy. Thanks to Popeye, our boys like spinach, so we plan two meals of spinach per week, one of asparagus, and two of green or yellow beans.

We list all the vegetables which will grow in our locality and select the ones our family enjoys the most. Then we figure how much we must plant in order to have enough of each vegetable throughout the growing and nongrowing seasons. There are so many vegetables available that we do not try to serve them all every week.

However, we do boast that we have two different vegetables, besides tomatoes and potatoes, each day of the week—and sometimes without serving the same vegetable twice during the period.

Below is a chart, such as we prepare every winter for our family of four. Note that it shows what amounts of foods must be processed, how much must be planted, and how much seed will be required for the necessary yield in our Kansas area.

We have determined, for our own use, how many of a fresh vegetable it takes to make a specific amount of vegetable when it is canned. Perhaps our little calculation will help you:

1 bushel unshelled fresh peas will make 12 pints
1 bushel green beans will make 16 quarts
1 gallon fresh greens, packed down slightly, will make 1 pint
2 pounds carrots will make 1 pint
1½ pounds beets will make 1 pint
2 pounds tomatoes will make 1 quart

The chart below has done more to get us a well-planned garden—one that does not waste food nor time nor energy—than practically any other single item. By looking at the equivalent of canned and fresh vegetables, we find one bushel of peas will make about 12 pints. Because we wish 64 pints of processed peas, we order 2 pounds of peas for seed and plant two 100-foot rows.

From the two rows, considering normal weather conditions, we expect to harvest 8 bushels, which will process 96 pints. We have calculated that we need to process only 64 pints of frozen or canned peas, so the remainder will be used fresh from the garden.

During the late winter months, we also check our garden kit. This kit contains hand tools, garden plow attachments, and the necessary insecticides and fungicides. In it we have a favorite bulletin telling about the treatment of injurious insects and diseases and a handy garden spray. This spray has a jar-cover attachment which can be transferred easily to

[*Turn to page 108*

Food budget and garden-seed needs for family garden

Vegetable	Processed food required for 32-week period			Seed per 100' row	Yield per 100' row	Amount of seed to be ordered
	Canned	Frozen	Stored			
Asparagus		32 pts.		50 plants	200 lbs.	40 plants
Beans, Fava		16 pts.		1 lb.		½ lb.
Beans, Lima		32 pts.		1 lb.	2 bu.	2 lbs.
Beans, soy		16 pts.		1 lb.	2–4 bu.	1 lb.
Beans, string	32 qts.			1 lb.	4 bu.	2 lbs.
Beets	32 qts.			1 oz.	2½ bu.	2 oz.
Cabbage	16 qts. kraut		10 heads	1 package	60 heads	36 plants
Cantaloupe				½ oz.	100	½ oz.
Carrots	16 pts.		1 bu.	½ oz.	3 bu.	1 oz.
Cauliflower		16 qts.		¼ oz.		36 plants
Celery			12 bunches	⅛ oz.	200 stalks	24 plants
Corn	12 pts.	20 pts.		3 lbs.	50 doz.	3 lbs.
Cucumbers	16 qts.			¼ oz.	1½ bu.	¼ oz.
Eggplant				¼ oz.	100	6 plants
Kohlrabi				½ oz.	4 bu.	¼ oz.
Lettuce, head			30 heads	¼ oz.	70 heads	4 doz.
Lettuce, leaf				1 oz.	Too much	1 oz.
Mixed vegetables	32 qts.					
Okra	16 pts.			⅛ oz.		⅛ oz.
Onions			2 bu.	300 plants	3 bu.	500 plants
Parsnips			½ bu.	1 oz.	4 bu.	½ oz.
Peas		64 pts.		1 lb.	4 bu.	2 lbs.
Peppers						6 plants
Potatoes			12 bu.	10-15 lbs.	1½ bu.	50 lbs.
Potatoes, sweet			2 bu.	85 plants	2 bu.	85 plants
Pumpkins			16	½ oz.	50	¼ oz.
Radishes				½ oz.	100 bunches	½ oz.
Rhubarb				3 doz. plants	300 stalks	12 plants
Spinach		64 pts.		2 oz.	12 bu.	4 oz.
Squash			32 lbs.	½ oz.	100	½ oz.
Tomatoes	128 qts.			36 plants	4 bu.	96 plants
Turnips			1 bu.	½ oz.	4 bu.	1 oz.
Watermelons				½ oz.	40	½ oz.

LIVELY STEPPER IS THIS SUPER — Model 51, 4-door fourback Sedan — with its brilliant new F-263 Fireball engine of 124 or 128 hp. Dynaflow Drive* optional.

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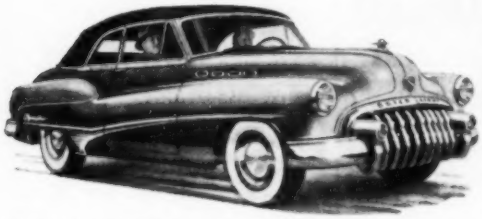
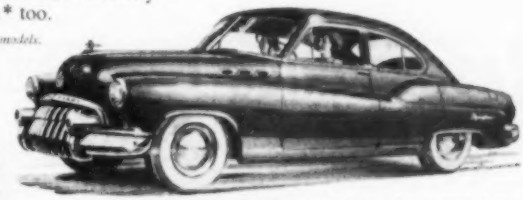
Delivery on most models is mighty fast. So – *get that order in.*

BUICK DIVISION OF GENERAL MOTORS

*Standard on ROADMASTER, optional at extra cost on SUPER and SPECIAL models.



THIS BUICK CONVERTIBLE is shown on the ROADMASTER chassis of 126¼" wheelbase, 152 Fireball hp. Dynaflow Drive* standard. Also available on SUPER chassis with 121½" wheelbase, 124 or 128 hp and Dynaflow Drive* optional.



ONE OF SEVEN BRILLIANT SPECIALS is this Model 43 jetback 4-door Sedan. 115 or 122 hp valve-in-head straight-eight Fireball engine. Choose from 3-passenger Coupe, two 2-door Sedanets, four 4-door Sedans. Dynaflow Drive* optional.

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Good-eating garden

[*From page 106*]

any of the standard-mouthed fruit jars.

Therefore, we store, in labeled fruit jars in the kit, the insecticides and fungicides recommended to keep injurious insects and diseases under control.

All our seeds are ordered right after the new seed catalogs come out. Our whole family helps select the variety of seed or plant. In selecting each, special attention is given to its adaptability to our locality. The children get much fun out of deciding which variety will give us the most and best eating. They get a great deal of help from the Kansas Experiment Station which recommends certain varieties best adapted to various areas in Kansas.

When the first signs of spring appear, we give our garden a light harrowing. We *do not* put the tractor and heavy equipment in the garden at this time. Next we use a marker to measure off the rows. In Kansas the usual limiting factor for a good garden is lack of moisture, so we space our rows 3 and 6 feet apart. This allows plenty of soil space and clean cultivation, so that we rarely need to irrigate before July.

The marker is a 2x2-inch board 6 feet long, fastened to the garden rake. It has dowel pins at each end and in the center, each 3 feet apart. One trip through the garden with the marker usually marks off all the rows I can plant at a time.

Once the rows are marked, I get one of my menfolk to take the garden plow and, with its single shovel attachment, make a ditch the proper depth for each crop to be planted.

Now to the actual planting: In order to rotate the garden crops so they do not grow in the same section year after year, we reverse the order of planting to the other side of the garden each year. This usually avoids most of the danger of disease propagation.

We thumbtack our planting plan to the lid of the seed box, which, by the way, has been in use 27 years. It serves also as a file for seeds. The season's seeds are all arranged in the order of planting.

Included in the box is a planting apron, similar to a clothespin apron. It goes over the neck and ties around the waist. This apron allows freedom of both hands for planting, and it saves trips across the garden. In one side I put all the seeds to be planted on a specific day and in the other side I keep the open sack from which I take the seeds when I am actually planting them.

We plant as early as possible, yet late enough to avoid freezing of seedlings.

We control the weed seedlings with a garden plow equipped with a 16-inch spike-tooth attachment. About June, when the soil becomes firmer, we use a 5-tooth cultivator and go over the entire garden in an hour. There is never a better application of the saying, "A stitch in time saves nine," than in the timely cultivation of the family garden.

Yes, the Cunningham garden is a matter of pride to all our family. There's a wintertime thrill in seeing the storage shelves filled with processed food, in getting a "whiff of summer" when the frozen corn and other frozen vegetables begin to cook, and in seeing the records show a nonmoney income of at least several hundred dollars. END

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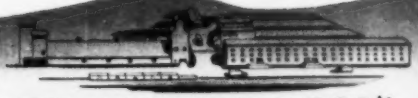

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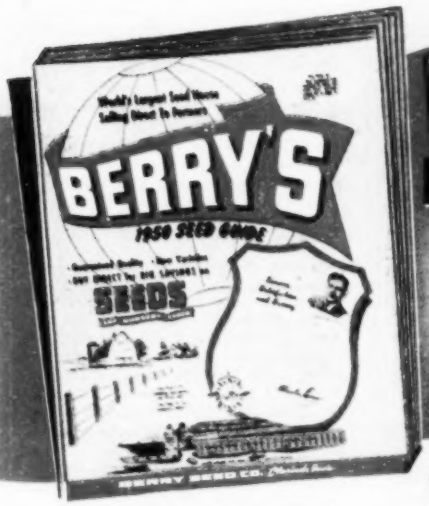

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Evergreen seedlings and transplants. Fruit and shade trees. For complete catalog write Box 23B.
MUSSER FORESTS, INC., Indiana, Pa.

Good legume stand

[*From page 45*]

can clip the rank wheat with a mowing machine. Mow at "full tiller," just before jointing, and take off half or more of the leaf growth present. If the unclipped wheat lodges, the clipped wheat may outyield the unclipped. If there is no lodging, clipping will usually cause a loss of 4 or 5 bushels per acre, but it often saves a legume stand.

So far, we have talked entirely about winter grain. Sowing in spring grain brings a whole new set of problems. A spring grain companion crop should be sown at least 2 pecks lighter than when it it is sown just for grain. The advantage in this is not great, but it is important.

There is no such advantage in sowing winter grain at light rates. Unless the rate is excessively low, or it is sown extremely late, winter grain will have time to stool out until it produces a normal number of heads from the rate sown. Thin stands of grain are less likely to lodge than thick stands, as well as giving less direct competition to the seedlings.

We sow spring grain and forages at the same time, so they grow together for a period without competing too much. The forages can better endure shading and drouth when it comes after they have some growth. That is the basic reason for the greater success of alfalfa and sweet clover in spring grains.

But in spring grain, we sow on newly prepared—and therefore loose—seedbeds. Forage seeds are small. They come up best from under only ¼ to ½ inch of soil. On loose seedbeds, they can hardly be planted as shallow as that, except by broadcasting. Then loose soil quickly dries out deeper than ½ inch, so that shallow-planted seed does not start—or, worse, it starts, but the seedlings cannot establish.

In spring grain, or on any prepared seedbed, every precaution should be taken to avoid sowing forages too deep. The usual grass-seed attachment in the grain drill will waste half or more of the seed sown through it, because it broadcasts the seed in front of the grain discs. Then the discs cover much of it too deep.

> **Marriage is a process for finding out what sort of guy your wife would have preferred.** — *Strickland Gillilan*

Ohio Experiment Station workers tell of repeated failures of timothy on one of the experiment farms, where previously they had been getting good stands. They had bought a new drill with a grass-seed attachment, and the farm superintendent, naturally, had sown timothy from it when the wheat was sown. When they went back to broadcasting timothy after the wheat was sown, they had no more trouble.

You can broadcast after seeding, or get the same result by substituting long delivery tubes on the grass-seed attachment for the usual short ones and tying them back to deliver the seed behind the drill. If you arrange these tubes to put the seed directly over the fertilizer band, it is nearly ideal. Changing the delivery tubes on your grass-seed attachment will

save a lot of high-priced seed this spring. Many companies have such tubes for their drills. Or rubber tubing can be cut to fit.

Even the special grass-seed drills often put forage seeds in too deep. It requires an especially firm seedbed if they are not to do this.

It is common to roll the soil, after seeding, with a corrugated roller. This is valuable, but it is much more important to use a corrugated roller *before* seeding. An almost ideal seeding tool is a seed box mounted between two sections of corrugated rollers. In this way the soil is firmed before the seeding; the seed falls on firm ground and is covered at a uniform, shallow depth. Such seeders account for big savings of seed.

A firm seedbed under the seed is important in fighting another enemy of spring and summer seedings—crusts on the soil.

Seeds have an amazing power to break crusts if they have something to push against, but if the seedbed is loose and a dashing rain forms a crust on top, seeds below the crust may literally push themselves into the ground instead of breaking the crust. It is not practical to break crusts over forage seeds mechanically once they are formed, but mulches can do a lot to prevent their formation. Mulches conserve moisture and prevent the formation of crusts.

Many a good seeding is destroyed by overpasturing in the fall. It's a good idea to pasture a new seeding down close once, but early—before September 1, on parallel 40 degrees. After that—for about the last six weeks before killing frost—no grazing of alfalfa and clover mixtures should be permitted. Straight sweet clover, however, is best grazed in October. The legumes must have a period of undisturbed growth to accumulate reserve foods in their roots, so they won't winterkill. We don't expect a 6-year-old to carry a man's load, but we often expect a young seeding to take grazing that would damage an old sod.

Combined straw should be taken off all new seedings of red clover and alfalfa, especially east of the Mississippi river. In Ohio, as a 3-year average, when combined wheat straw was left on a clover-alfalfa seeding, the yield the next year was just half what it was where the stubble was clipped and the straw removed.

After all, as with most farming operations, good seedings result from doing a lot of small things just right. Few farm operations pay better dividends than exact attention to all the necessary details of the meadow seeding. **END**

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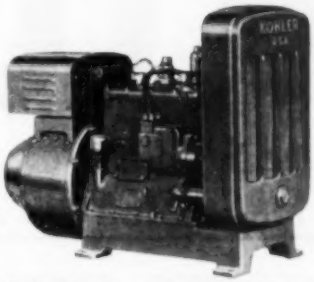

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Imagine going through winter without *a single cold!* You have a chance to do that, if you use this new drug discovery properly! Keep Inhiston handy at home and carry a pocket-packet with you at all times.

The first sneeze or sniffle may warn you "a cold is coming!" Act fast! Now is the time when "histamine" is released in your system and the cold is "taking hold." Antihistamine is needed—*fast!*

Take 2 Inhiston tablets at once. In research with various anti-histamines where treatment began within an hour after first sign of a cold, in a great majority of cases, the cold was *stopped!*

Mrs. E. Scimonelli, Ozone Park, N. Y., says: "I felt a cold coming. I was sneezing, my nose was stopped up. I took 2 Inhiston tablets. Next day I took 1 more tablet; my cold was gone."

Inhiston is the new anti-histamine tablet you've read about!

Now, at last, mankind has a real weapon against the common cold on public sale at your drugstore. It is Inhiston, the anti-histamine tablet!

Inhiston is not merely another "cold tablet"—not a salt, effervescent powder, aspirin or quinine compound. Inhiston is an *anti-histamine,* with an action based on a new, revolutionary concept of cold treatment. Nation-wide research on various anti-histamines proved that *colds can be stopped,* in a great majority of cases, if anti-histamine treatment begins within an hour after the first cold symptom appears.

Remember—*insist on Inhiston!* We know of no other product on public sale with Inhiston's anti-histamine formula. So *insist on Inhiston* for your cold.

FOLLOW THESE RULES!

1. Buy a bottle of Inhiston *at once* for the medicine chest.
2. Get several pocket-packs of 12 Inhiston tablets so you and your family can have Inhiston handy at all times, ready to take *at first sign of a cold.*
3. If you now have a cold, take Inhiston immediately to shorten the cold and reduce the sneezing, sniffling and coughing.

NOTE: In any illness, your wisest course is to see your doctor at once. All too often, symptoms associated with colds can be the first signs of more serious illness. If you have chest pains, a marked fever, severe coughing, or other unusual symptoms, *stay in bed and call your doctor!*

inhiston

Trade Mark

THE ANTI-HISTAMINE TABLET

TO BE TAKEN AT FIRST SIGN OF A COLD

12 TABLETS—39¢
36 TABLETS—98¢
100 TABLETS—$1.98

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New helps for the beekeeper

By M. W. Hartung

Recent tests in the Pennsylvania State College Apiary have shown that the amount of honey in wintering hives of bees is as important a temperature regulator as it is a source of food.

The findings show that it's a good idea to have a full super on wintering hives of bees. This has been recommended for some time, but mainly as a source of food.

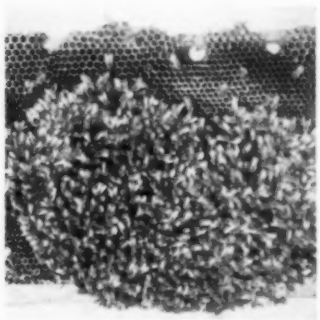
Temperature, though higher in the hive, will change with outside conditions regardless of the type or amount of packing. What packing and honey content actually do is slow down the temperature changes within the hive. In effect, the combs of honey serve as insulating material which absorbs heat and loses its warmth slowly when temperature begins to drop. This gives the bees more chance to form a tight winter cluster before the temperature within the hive becomes dangerous.

No connection between high humidity within the hive and nosema disease has been found. In fact, it is known that high humidity is necessary to the bees' welfare. In the winter, humidity, along with temperature, keeps stored honey in a readily consumable liquid form; if both temperature and humidity are dropped to any great extent, the honey becomes too thick for the bees to eat.

Though humidity plays an important part in the hive, too much moisture is harmful to the colony's welfare. Excess moisture causes new honey to remain too thin, and fermentation spoils the honey. This excessive moisture may be checked by proper packing and well-placed openings.

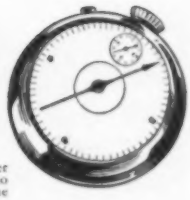
The most efficient packing is hay or straw. Sawdust, though saving more heat, retains too much moisture within the hive.

In packing, a cloth should be placed across the hole in the inner cover and the straw or hay placed on top of that. In this manner, excess moisture from the hive will have a chance to escape into the packing. Space should be provided for outside air to circulate between this packing and the outer cover. END



Tight winter cluster helps bees through cold weather. Extra honey helps them form cluster

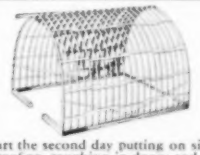
Hold a stop watch on your Barn



● Every hour you can chop off your barn building schedule means fewer dollars spent for labor . . . fewer backbreaking days of toil for you. Want to know how you can get your barn up and in use weeks earlier? See the sketches below. Then see your Rilco Lumber Dealer. He can give you details.

1. Rilco Glued-Laminated Barn Rafters come to you all ready to put up . . . cut to fit . . . drilled for connecting hardware. Bolt rafter halves together at crown and raise. Then bolt to sill. Time: about ten minutes.

2. Additional rafters are raised and bolted, held rigid by sheathing boards till sheathing is put on. Time: average barn completely framed in *one* day.



3. Start the second day putting on siding and roofing, roughing in doors and windows. With ordinary construction you wouldn't be ready for this work for at least three weeks. Rilco Rafters save time and labor costs.

4. Your barn's ready! It's sturdy, wind resistant . . . stronger, more modern and attractive. And it has no inside supports to get in your way. There's more usable space in any Rilco Barn.

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RED CLOVER Fully reclaimed—contains none other crop seed—guaranteed satisfactory. Sample FREE. $25.40 BU.

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Good rules for better farming

[*From page 33*]

pasture, while Farmer B used nearly 8 percent on his farm.

This sound land-use program, of course, is closely tied in with **Point 2**—good rotations and field arrangements. Farm A's history on this point goes back to 1918, when Mosher suggested an overall field arrangement and cropping pattern to the present owner's father. The planned program of soil testing, fertilizer, and fitting crops to the land was started at that time. It's been followed ever since.

The payoff for the first two rules is higher crop yields, which is **Point 3.** Here's what the records tell about yields: For the 22 years, corn yields on Farm A averaged 60.4 bushels per acre—a little over 12 bushels per acre higher than the average of 47.9 for Farm B. The difference in soybean yields is perhaps more striking if not as important. The records for Farm A show an average bean yield of 23.7 bushels per acre, compared with

> **Face powder may win a man, but it takes baking powder to hold him.** — *Reginald Shawcross*

only 15.1 for Farm B. And there was an average of 10.4 bushels per acre difference in the oats yields on the two farms—46.5 for Farm A, and 36.1 for Farm B.

The use of soil-building legumes in the rotation, soil testing, and the use of the right amounts of fertilizer at the right time explain part of this difference in crop yields. But there are other reasons. Careful use of all available manure is one, Mosher says. The use of germination-tested and disease-treated seed of recommended crop varieties is another. And these things must be coupled with careful seedbed preparation, planting, and cultivation, and with the control of weeds, insects, and disease in the growing crops.

While higher crop yields for the top farm go a long way toward explaining that $5,000-a-year difference in income, they don't tell the whole story. **Points 4** and **5** deal with livestock and efficiency of livestock production. Records of the two farms on this score help explain more of the difference in dollars.

One way to study the livestock project on a farm is to look at the total value of the feed fed to livestock. Farm A, for example, fed an average of $27.62 worth of feed per acre per year, while Farm B fed only $10.56 worth. In terms of feed, this means that the top farm's livestock volume was more than 2½ times that of the farm down the road.

When we come to kinds of stock raised, the difference in management ability between the two farmers stands out like a sore thumb. Farm A produced an average of 89,000 pounds of pork per year for the 22-year period. Farm B produced an average of only 28,000 pounds. What about profits? With 89,000 pounds of pork, Farm A had an average return of $154 for every $100 worth of feed fed to hogs. Farm B showed a return of only $140. Through all the years, Farm A averaged one pig per litter more than Farm B. And all hogs on the first farm

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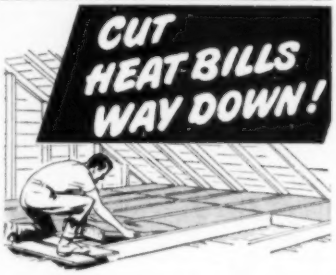

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were sold for an average price of $10.30. The hogs on Farm B brought an average price of only $8.58 for the 22 years.

If you wonder about that wide difference in sale price of hogs between the two farms over the years, Mosher can give you many reasons. Looking back over the records for a recent 10-year period, he found that Farmer A marketed nearly all of his spring pigs in the fall at an average market weight of 234 pounds.

During the same time, Farmer B delayed his marketing until late winter, and even then the average market weight of his hogs was only 208 pounds. At the same time, Farmer A increased the numbers of hogs more during years of higher prices. Earlier farrowing, the use of high-quality breeding stock, well-balanced rations, and attention to health—those are some of the other things that paid off and helped boost the figures on the income side of the ledger.

The records show a similar story for beef cattle and poultry. Farmer A fed an average of $1,688 worth of feed per year to beef cattle and got back $1,935. Farmer B fed exactly the same dollar value of feed to beef cattle, but his return on his feed investment was only $1,527. On poultry, Farmer A returned $155 for every $100 worth of feed fed, while Farmer B returned only $110.

After looking at these livestock figures, it's a lot easier to answer the question, "How does one farm make $5,000 a year more than another?" But we have taken up only half the points in our 10-point program. The others can't be ignored. High income is part of the story, but keeping expenses down is nearly as important. Let's see how the two farms rate on this score:

Take **Point 6,** for example. This calls for a carefully planned use of labor and for keeping labor costs down. Farm A used $1,643 worth of labor per year, while the labor bill for Farm B was $2,022, or nearly one-fourth more. Why? Again Mosher says there are a number of reasons. Thorough planning of the crop and livestock systems so there is a minimum of conflict between the two will help. So will the arrangements of fields, lots, and buildings. And more labor time can be saved through the use of self-feeders and through feeding cattle and hogs on pasture.

Closely tied up with low labor cost is the effective use of power and machinery on the farm. This is **Point 7.** Costs on

> **A woman's advice is never worth having, but no one except a fool refuses to follow it.**
> —*Spanish Proverb*

Farm A were kept to an average of $1,227 per year, according to the records. The costs on Farm B expanded to $1,456 per year. There was this difference in machinery costs even though the farms were the same size, with roughly the same acreages devoted to the main Cornbelt crops of corn, oats, and soybeans.

The difference again has to do with care and management of machines. Low machinery cost means careful purchase of strong, well-built machines to start with. It means having plenty of power for the work to be done and avoiding oversupply of power and transportation units. It means being on speaking terms

[*Turn to page 116*

After field work or farmhouse chores — EVEN

EXTRA DIRTY HANDS COME EXTRA CLEAN

in 30 to 50 seconds with LAVA SOAP!

UNIQUE *DOUBLE-ACTION* WHICH NO OTHER LEADING SOAP HAS!

(1) In every inch of LAVA's lather, 50,000 tiny scrubbers rout out ground-in dirt.
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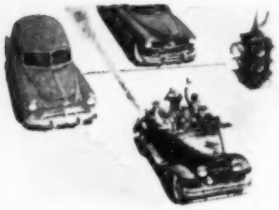
Towels Saved—Smudged No More!
Yes, dirt's *off* and *down the drain*—in 30 to 50 seconds. Not *wiped* off on your clean towels, but cleaned off *clean*.

NOTHING CLEANS BETTER THAN **LAVA**

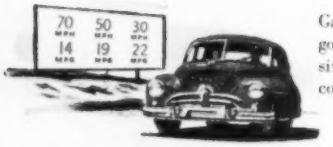
The good gray bar with the creamy, snow-white lather

BE A CHAMPION DRIVER

FOLLOW THESE RULES TO STRETCH GAS MILEAGE



Showoff acceleration proves nothing and is extremely wasteful of gas. Normally this type of driver has to slow down a moment later. Drive steadily—you will arrive at your destination **safe and sound.**



Gas mileage goes down drastically as speeds go up. Table at left is based on actual tests of six-cylinder medium-priced cars. Drive at conservative legal speeds **because it pays.**

Have your spark plugs tested, cleaned, adjusted regularly, replaced every 10,000 miles. One missing plug in a set of six wastes up to one-sixth of your gas—to say nothing of impairing starting, performance and dependability. You can rely on your Champion dealer **for dependable service.**

A *Champion* driver cultivates driving habits that will increase the pleasure, the performance and the economy of his car throughout its useful life. As one of the most important investments you have, it deserves the best in service and equipment. When you need spark plugs, follow the experts—race drivers, master mechanics, airline and fleet maintenance men, who insist on dependable Champion Spark Plugs . . . ***BE A CHAMPION DRIVER—IT PAYS.***

Guy Lombardo, famous for "the sweetest music this side of Heaven" and equally noted as a motorboat racing champion, says,

"I always use dependable Champion Spark Plugs to get the sweetest music out of my engines."

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CHAMPION SPARK PLUG COMPANY, TOLEDO 1, OHIO

Listen to the CHAMPION ROLL CALL . . . Harry Wismer's fast sportscast every Friday night, over the ABC network

Good rules for better farming

[*From page 115*]

with the instruction book that comes with each machine and not being afraid to use an oilcan and a grease gun. Protection of machines against weather and livestock also helps cut down repair bills.

There's one other cost item that's overlooked on a good many farms, especially those that don't keep detailed records. That's the cost of buildings and fences—**Point 8** in the list. Mosher says that most comparisons of high- and low-earning farms show a larger investment in buildings and fences on the low-income farms.

This certainly is true of the farms we've been talking about. Farm B was overequipped for the livestock produced. Costs of buildings and fences were a whopping $486 per year compared with $205 for Farm A, which produced more than three times as much pork per year.

When we were talking about the hog enterprise, we mentioned the difference in marketing time and sale prices. That's pretty good evidence that Farmer A paid more attention to prices and price trends, which is **Point 9** of Mosher's list. And it goes right along with a study Mosher made a few years ago showing that farmers who attended outlook meetings, studied outlook reports, and kept posted on marketing problems were earning several hundred dollars a year more than those who paid no attention to markets.

Point 10 has to do with having a big enough farm and big enough farm business for good family living. While both farms have roughly the same number of acres, Farmer A has used management ability to increase the size of his farm business; and the payoff certainly has been in better living.

We started off this article by saying that, from a distance, you couldn't tell these two farms apart. But over a period of 22 years they have been $110,000 apart. And the difference has been in the way the two farmers followed the 10-point program for better farming. **END**

SUCCESSFUL FARMING

"American Prefabrication Company? Something went wrong with our order—we got all bathrooms!"

What's new in farming

[*From page 10*]

trefoil; tall oat grass with alfalfa, Ladino clover, or birdsfoot trefoil; smooth brome, reed canary, or tall meadow fescue with alfalfa.

Bale gun. Load with a bale, aim at the hay door, and fire when ready. That's the way this hay-bale catapult works. Its accuracy and ease of operation are said to be good. It uses compressed air to operate a ram which will kick a bale 40 feet high, at the rate of about three bales a minute. It was designed and built by F. W. Moffet, Idylbrook Farms, Rochester, New York. He has built two of the machines, handled 15,000 bales with one last season.

Penicillin aids orchardists. Add one more use to those of the wonder drug. Crude penicillin has been used to treat crown gall in orchards.

Research workers at the State Experiment Station in Arizona treated gall by wrapping the growth with cotton soaked in crude penicillin of maximum strength.

Treat pastures now. Winter treatment of pastures pays. U.S.D.A. tests show this to be a good system: Manure and lime the sod; then tear it up with a disc. This is best done in late fall, but could be done during open winter weather. The manure and chunks of sod hold snow and put a brake on erosion. In March, apply phosphate and potash fertilizers, double-disc, and reseed with a mixture of brome, alfalfa, red clover, and Ladino clover. A first growth, often weedy, can be cut for silage in May. In late summer and fall, the new seeding can be pastured. END

Moving?

If you are going to move, please let us know five weeks beforehand if possible. If you wait until later to notify us, some issues may miss you. Copies are so scarce that back numbers cannot be duplicated.

Be sure to send your change of address to *Successful Farming*, Des Moines 3, Iowa, rather than to your local post office. Give both your *old* and *new* addresses. Please furnish a clipping of the stenciled label from a recent issue, or indicate exactly how your magazines have been addressed.

The Pillsbury 4X FEED CLUB

By JOHN D. MARTIN

I have had an opportunity this winter to talk to a good many successful dairy farmers. They are all practical men, and I'd like to pass on to you some of their views on what it takes to make money with dairy cows.

First—ahead of anything else—is keeping individual production records. As one producer points out, no man can feed wisely or economically if he does not know exactly what each cow is giving. Certainly he cannot select cows or a herd sire without milk weights.

It is not difficult or complicated to keep dairy records. It would not be practical if it took a lot of time and trouble.

You can get a good supply of convenient dairy record cards from your Pillsbury's Best Feed dealer. No charge at all. And if you do not have a dairy scale, he can tell you how to get a really good one on a very attractive offer.

Another thing that gets a lot of attention from my dairy farmer friends is the feeding of the dry cow. They claim that the feed you give a dry cow pays you as much ultimate return as any other feed she gets. Here's what they feed for:

To restore depleted reserves
To build up her body
To nourish the unborn calf

An excellent feed for a cow's rest period is Pillsbury's Best Dry and Freshening Feed. It has the carefully selected nutrients that a cow must have if she is expected to do her best after she freshens.

Be sure to save the Extra-Value coupons that come in all Pillsbury's Best Feeds and Concentrates. Use them to save up to 50% on silverware, lamps and other valuable items for your home and family.

It Pays to Keep Hog Records, Too

Royer Fourman, R. R. 3, Arcanum, Ohio, keeps records, like any other good businessman. A letter from him the other day tells of a splendid job of feeding out a bunch of hogs, but what impressed me most is that he had a complete record of the whole feeding operation when it was finished. This is what he says:

"I have just finished feeding 75 head of hogs, using Pillsbury's Best Hog Concentrate and Pillsbury's Hog Pellets, with ladino clover pasture. The concentrate was mixed in ground corn at the rate of 200 lbs. per ton, and the pellets fed free choice.

"At the age of 5½ months they averaged 200 lbs. Records were kept for everything and when figured out they read like this: 8.25 bushels of corn and 51.3 lbs. of concentrate and pellets for each of the 75 head. Thanks to Pillsbury's Best Feed.

"Also I can vouch for Pillsbury's Best poultry, dairy and calf feeds."

THOUGHT OF THE MONTH

Animals are such agreeable friends; they ask no questions, pass no criticisms.
—George Eliot

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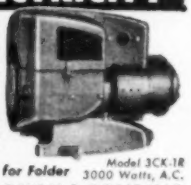

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Laughing at Life

"What Do I Do Now?"

The employer asked his secretary to look at a letter addressed to him.

"I can't make out whether it's from my tailor or my lawyer," he worried. "They're both named Smith."

And this is what his secretary read: "I have begun your suit. Ready to be tried on Thursday. Smith."

It's the Law

A resident of a small town owned a goat. His neighbor happened to be the tax assessor. He didn't particularly relish having the goat so close to him, so he taxed his neighbor's animal $4.

The owner of the goat demanded to know why.

"That is strictly in accordance with the statutes," replied the tax assessor. He thereupon read from the official records: "All property abutting and abounding on the public street shall be taxed at the rate of $2 per front foot."

Small Wonder

A Crosley driver ran out of gas on a country road. Along came a Cadillac. Its driver offered the stranger a tow to the nearest station. They were moving at 60 miles an hour when the Crosleyite spotted a traffic policeman following them and honked his horn in warning.

The driver of the Cadillac decided to outrun the officer and increased his speed to 85. Finally the officer gave up, drove back to the station, and stripped off his badge and gun.

"I'm through," he announced. "I've seen everything. I might expect to be outrun by a Cadillac, but when there's a Crosley behind him giving him the horn, that's too much."

The Error of Our Ways

(Calls From the News Columns)

Straight Talk

The final score had her winning eight debates and lousing four.—*Ohio University Alumnus.*

Garden Tip

Socks planted now will bloom this winter.—*Palo Alto (California) Times.*

Heavy Responsibilities

Sgt. Krueger Married New Trucking Unit.—*Green Bay (Wisconsin) Press Gazette.*

New Fashion Trend

The pretty girl had wrapped around her throat an antique gold chair.—*Wildwood-by-the-Sea (New Jersey) Leader.*

Suds in Your Eye

Prune juice is a healthful drink. Soap prunes overnight and stew them in same water. Pierce to let out juice.—*Skagit County (Washington) Shopping News.*

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No wonder they looked glum when they called in the burner serviceman. He phoned me, and I highballed right over.

When I got there, the bitter cold had begun to seep into the house, so I worked fast.

I'm a "neighborhood" welder. That's a fairly new kind of business, but a lot of us have started up since the war. And we've found plenty to do, with so many kinds of equipment wearing out and breaking down, and new replacements often impossible to buy. I'd done two, three furnace jobs for that serviceman before, which brings me back to the Fergusons.

Now you take a cast iron furnace. When a section lets go, either you face a long tear-down-and-replacement job . . . or a whole new unit. But with my portable welding outfit and a few Ni-Rod welding rods, I had the repair finished in jigtime.

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* * *

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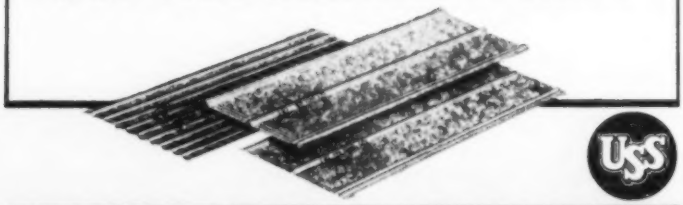


USS

UNITED STATES STEEL

Waste-preventing hog feeder

By Harry L. Spooner

Ralph Deterding, farming north of Stanford, Illinois, raises about 100 hogs each year. He disliked his old, usual-type hog feeder because the hogs had to stand on the ground to eat from it and tore up the ground there. This made it unsightly and inconvenient, especially in wet weather. He also disliked the small capacity of most feeders.

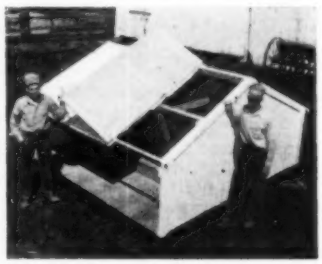
Therefore, early this year Deterding and his helper, Emery McClure, took two days off from other duties and built a feeder which meets his idea of what a feeder should be.

The new feeder is portable. It is 9′6″ long and 10′ wide. It is 5′4″ high at the peak and 2′7″ high at the eaves. The frame is made from 2x4's, the floor from 1x12's. The sides and roof are made from 1″ matched lumber. The roof has two doors on one side that may be lifted to fill the big bin in the center. The feeder is mounted on four 4x6 runners, so it may be moved between fields by tractor.

The bin has a capacity of 100 bushels. The feeder will feed 20 pigs, up to 100 pounds weight, at one time. It is built so the pigs stand entirely inside on the floor, and the big roof covers them completely.

"There is no waste of feed, and the pigs don't rake it out," says Mr. Deterding. "The pigs are protected from the weather when eating, and they don't tear up the ground around the feeder.

"I find it convenient for my hogs because they follow the cattle. Cattle can't dislodge the roof or get to the feed, so there is no need of building a fence around the feeder." END



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How to train your dog

[*From page 47*]

reward him by praising and petting him. If the job was especially well done, slip him a piece of hard-boiled, diced liver.

Dogs learn by repetition and association. If, for instance, staying quiet at a certain spot is rewarded by a snack, the usually disagreeable task of staying put and letting the master walk off is associated with a piece of liver that follows. This makes learning fun.

How to punish. Should there be some misunderstanding, the punishment can be done by talking to the dog in a stern, disapproving voice, or he might be spanked. But watch these basic rules:

(1) Punish instantly as soon as the offense occurs. Even if the punishment happens only a short time later, the dog cannot connect it any more with his bad behavior, and the spanking will appear completely senseless to him.

(2) Don't take revenge on the dog. Punishment in anger may be an outlet for your own pent-up grievances, but it will always be too severe.

(3) Never use your hand to punish the dog. A dog must love and trust his master's hands, so use a twig or a rolled-up newspaper which makes a lot of noise when applied properly.

Good and bad habits. Teaching the dog good habits—like responding to a good name that carries over a distance, being housebroken, and not jumping up on people—should begin the very first day the pup is brought home.

He also must learn to *leave chickens alone.* If the pup has killed one, take it immediately and slap the dog with it. Then tie the dead chicken to the dog's collar in such a way that the bird hangs down between his front legs. This bothers him very much while he's running around and the presence of a chicken becomes something a good dog will avoid.

The egg-sucking dog can easily be cured this way: First, locate the nest being pilfered by the dog. Then take three or four eggs, make holes in both ends of each, and blow out a small amount of the contents.

Next, pour into each egg a good dose of powdered cayenne pepper. Seal both ends of the eggs with wax. Shake each sealed egg well to mix the pepper with the egg contents. Then, replace the eggs in the dog's favorite nest. When he returns for his illegal snack, he will get an unpleasant surprise, as you can imagine. One or two such lessons probably will cure him of egg-sucking for good.

If your dog chases cars, you can break this habit by pouring spirits of ammonia on him when you catch him in the act of chasing your own car. Because car chasing is peculiar to many breeds with herding instinct, this treatment might save a good stock dog's life.

Should your dog be a *sheep-killer*, however, better present him as a gift to a city cousin because it's almost impossible to cure a dog of being a sheep-killer.

When to start. Actual training of the dog should start when he's 6 to 8 months old. But if the dog has good habits and minds well, training can even be done with a much older animal. Actually, the old saying, "You can't teach an old dog new tricks," isn't correct.

To teach him "Come here," follow copy and illustrations on page 46. As he learns these moves, he will go through a phase in which he will obey very well while on the leash, but won't come when released. Here's how to remedy that: Turn him loose in a fenced yard, command him to come, and if King is disobedient again, pepper him with a handful of small pebbles. Now he will consider you as a most powerful and admirable creature, who can control him even at large.

The next step in King's curriculum is to walk on a leash and to "heel," as shown in the drawings. While leashing the dog, use the command "Heel" frequently. As soon as he seems to know this word, take off the leash and make him "heel," but still do these exercises along a wall or a fence, the dog walking between you and the fence.

If he hesitates, use the liver trick again. If he storms forward, a slight slap on the chest with a rolled-up newspaper will keep him in position, the middle of his body on the master's leg.

Next he must learn to *lie down and stay in place*. Walk your dog at heel, stop short, and press him gently, between the shoulders, to the ground while you command "Down." If he doesn't understand at first, tap the ground slightly with your left hand while the right hand continues to press. This will center the dog's attention on the ground.

Once the dog is on the ground on his stomach, don't allow him to roll over. If he has learned to go down as soon as you stop, command him to "Stay" and make an about-face, marching backward facing the dog. Take only a few steps backward. Even if he has stayed only a short time, recall and praise him. In later exercises, increase the distance and the time until the dog stays down even with his master out of sight.

Watchdog training. For this type of work, the illustrations on pages 46 and 47 tell you how to proceed. Most dogs have a warning or guarding instinct that is easy to bring out. Do these exercises at night, because dogs are naturally very much on guard during night hours.

Remember here, though, that most dogs, kept chained, become vicious easily. A chained dog can't move around at will and that gives him a feeling of fear whenever a person, especially a stranger, approaches. He makes up for this fear by being especially aggressive and vicious, and this type of guard dog might not be suitable for many farms.

Rat-dog training. A good rat dog is especially helpful in keeping the rodents under control following cleanup and poison campaigns. If you follow the directions in the illustrations, I believe that the dog you take out of the box will know his job. Remember: always wear *heavy* leather gloves while handling rats.

Herd-dog training. Training of a stock dog can start as soon as he knows the basic obedience exercises. And he must be very well grounded in them, if the training is to be successful. Follow the instructions on pages 46 and 47.

A stock dog first must learn to drive animals in any given direction. The setting for this lesson should be a fenced lane, because there the animals cannot scatter. Once everything is ready and

[*Turn to page 124*

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How to train your dog

[*From page 123*]

the animals headed in the right direction, release Shep from his leash and order him to "Drive on."

At the same time, point or swing your left arm in the desired direction. You see, all commands for stock dogs should be given by voice *and* motion because in bad, stormy weather, your voice might not carry at all. Your arm movement will start the stock forward and also will excite the dog to follow the animals and to drive them.

If the dog should be too ardent and wild, command "Down" until he is in full control again.

After Shep's lesson on circling the herd, shown in the drawings, don't forget to praise and reward him. Then send him on again while you remain with the flock.

The lesson on handling strays (see illustrations) won't be too hard for the dog because herd animals usually return to the herd when disturbed. This lesson is also a good preliminary in teaching the dog to drive the whole herd toward you, as shown on pages 46 and 47.

Another important duty of the stock dog is to walk ahead of the animals and see that none ventures down a side road. (See illustrations.) Start this exercise in a road with fences on both shoulders. Have a helper drive the herd, you and your dog walking ahead of the animals while the dog is commanded "Lead."

If you come to a crossroad, you and Shep must post yourselves there, Shep being ordered to "Stay." If an adventurous animal walks toward this road, command the dog to "Drive on." This will make the stray seek and follow the herd again.

Remember that, during all exercises, it's good to order the dog to lie down a moment if he shows an inclination to get out of hand. The number of lessons it takes for each of these exercises varies naturally with the individual dog. It might take from 18 to 30 lessons for the first steps, somewhat less for the later ones.

If you have an old, experienced stock dog, let the young pup run with him while he works, but be sure he knows his name and knows basic obedience. Then you can cool him off by ordering "Down, Shep" while old Rover continues at his work.

Choosing right dog. It is important for the dog trainer to remember the physical limitations and mental make-up of his dog. While I believe that all dogs make fine companions and decent watchdogs, it might be hard to make some breeds perform tasks for which they were not bred.

Some breeds, such as the German Shorthair Pointer or the Welsh Corgi, make pretty good all-around farm dogs. Other breeds are excellent in certain types of work, but not at other tasks. For instance, the Border Collie is a specialist in herding and the Schnauzer in ratting. (See "The Right Dog for the Job," page 48, March 1949 *Successful Farming*.)

Always keep in mind that a farm dog, even when pedigreed, should come from good working stock. This is especially true for herd and rat dogs where an inherited instinct for these jobs will save plenty of time and disappointment. **END**

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"Yes, give me the stanchion barn"

[*From page 36*]

to loose housing. Reports now indicate that some of these have found the system unworkable for them and have gone back to the time-tested, stall-for-every-cow barn.

A good many of the old dairy barns were built too narrow to allow for alleys wide enough for modern, laborsaving feed carts or carrier systems. Many of them were built with stalls too narrow and platforms too short for big cows. The trend today is toward more ample stalls, and dairymen are finding the investment a good one because they have fewer injuries. Comfortable cows produce more profit. Time and labor studies have shown, too, that cross alleys save steps, and that 19 cows in stalls that are large enough may produce as much profit as 20 cows that are crowded.

Unfortunately, many of the comparisons made by the champions of loose housing have been made with stall barns 30 or 40 years old. Obviously, such tests are unfair. You can't set up ideal conditions on one hand and compare them with outmoded conditions on the other.

The modern stall barn is built 36′ wide to provide for a wide feed alley, the manger, a long platform for the cow, the gutter, and the alley back of the cows. With the introduction and perfection of gutter cleaners, it may no longer be necessary to have a full 8′ wide alley to drive through with a spreader. Barn widths may be reduced accordingly, with enough savings in cost to pay for a gutter cleaner.

At the Electric Research Farm, Madison, Wisconsin, a 32′ wide barn has been remodeled with stall platforms 5½′ to 6′ long. The space was gained through reduction of the center alley to 5½′. The plan works very well with a herd of big Holstein cows. This plan also saved the cost of building additional lean-to space for needed width.

The older barns, built with unmatched siding, didn't present much of a ventilation problem. There was always enough air movement through the walls. Modern building methods and improved materials have made it possible to build tight walls and, as a result, have brought a ventilation problem.

Electrical power on the farm has solved this problem with controlled ventilation, which is easy to install and cheap to operate. With such equipment, it is possible to maintain inside temperatures and provide the fresh air that cows need. Dairy cows can stand a good deal of cold, but if they are to be kept clipped and clean to meet health regulations, and if watering systems are to operate as they should, temperatures of around 50 degrees are best. Men can work comfortably and calves won't need additional heat in barns held around this temperature. If ventilation systems are to work properly, barns need to be adequately insulated. Ventilation alone will not keep cold walls dry.

In milder areas where cows can spend a good deal of the year out of doors, the problem of housing is not a big one. In such areas, small milking barns holding six to eight cows at a time have proved practical. These are patterned after the

stall-for-every-cow barn. Groups of cows are brought in, fed, cleaned, and milked, then replaced with another group. This plan works fine because there is no bedding problem involved.

The milking room or milking parlor is essential with loose housing because cows can't be cornered in the pen for milking. It is optional equipment in stall barns. Some of the greatest gains in laborsaving have been made in construction and arrangement of the milking parlors. The newest type of parlor has the stalls on elevated platforms so that the man cleaning the udders and milking works at waist level, eliminating stooping.

With many milking machine installations, the milk is piped directly to the cooler so there is no lifting and carrying.

Farmers who like to keep their cows in stalls where they can handle them as individuals can—and do—use milking parlors, and they like the laborsaving advantages. The cows are moved from their stalls through tandem-type milking stalls and, after milking, return to their own safe stalls. An advantage of this plan is that each cow is fed in her own stall, according to her ability to produce. The best cows get the choicest feed. Dairymen with high-producing cows want to keep them in production for many years and like the chance to give them individual attention.

Feeding in the milking stall is sometimes done but, if rapid milking practices are to be followed, a milking stall for about every four cows is needed to hold cows long enough to eat their grain. No one has yet found a way to make Bossy bolt her food.

In addition to the many advantages already mentioned which the majority of dairymen find in their stanchion barns, probably the biggest advantage is in the saving of bedding. This factor of availability of bedding alone may be the final controlling one in the selection of dairy cattle housing.

On the average, it takes about double the amount of bedding to keep cows clean in loose-run barns. If bedding has to be purchased—and in many areas it is about as costly as good forage—the cost may be too high. *This expense goes on year after year.*

Of course, the men who have had experience with both stall-for-every-cow barns and loose-run barns are in the best position to judge the merits of the two systems:

Harry Martin, Ionia County, Michigan, doesn't agree at all with the "pushers" of loose housing. He kept cows in a loose-run barn for 10 years and finally spent $1,200 for remodeling his barn by putting in stalls and stanchions for his 38 Jerseys. He also added two calf pens and two maternity pens. When he had used the space for loose cows, he had to keep calves and maternity cows in another building.

"We farmed 390 acres and still could not provide enough straw for 38 cows in that loose-run barn," Martin says. "It seemed that we were running all over the county hauling straw. We couldn't keep enough bedding under the cows to keep them clean. The last thing we did each night was to go out and bed the barn. Every year we had to haul manure the week between Christmas and New Year's, and we had to clean the barn

[*Turn to page 128*

★ ★

ONE STANDS OUT

Marilyn Peirce of Haven, Kansas, hugs "Fatty", 4-H Club Angus Breeding Heifer champion, Kansas State Fair, 1949. Heifer's real name is Peirce's Princess Evelyn 176.

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"Yes, give me the stanchion barn"

[*From page 127*]

again just before the frost went out of the ground. It seemed that we were forever wallowing in manure.

"Since we have our cows in stalls, we are able to milk faster than we did when we took them through the milking parlor in relays. We lost too much time waiting for them to eat their grain rations. We couldn't feed grain in a common manger; we had trouble enough getting the cows to share hay and silage."

Martin can name 10 farms in his immediate neighborhood that once used loose housing. Today he doesn't know of a single one. They have all gone back to the stall-for-every-cow plan.

From Pennsylvania, A. J. Hoover and Son, of Sayre, report that they kept cows in stanchion barns for 25 years, then in 1946 built a new barn 36'x112' and started loose housing for 45 cows. "We used this program for two years," Mr. Hoover says. "We used a milking parlor, with the cows on an elevated platform, but even with this we didn't like anything about loose housing. We spent more hours of work with the cows and had more sickness and udder trouble than we do with cows in stalls."

These are but a few of many instances where farmers have tried loose housing for their herds only to go back to the stall-for-every-cow system. Each of these instances is a report on an established herd. The loose-housing plan seems best fitted for the beginning dairyman who has not established himself in the business, or for the farm operator who may wish to change his barns to other uses in the future. With the loose-housing plan he doesn't build permanently.

For the man who is building a new barn with the intention of using it for loose housing, it will pay to build a standard 36' width with columns spaced exactly as they would be in a stall barn. Then, if the barn is to be changed later, it can be done at a minimum cost. Hay storage and bedding can be kept in an overhead mow in either type of barn.

Some farmers pay more for harvesting machinery that is used only a few days a year than they do for a good barn. They wouldn't think of cutting grain with a scythe to save money, yet they try to use inefficient housing for their herds. Such farmers probably won't keep their sons on the farm, and they don't get the chance to hire the best men. When they rent their land they don't get the best tenants.

A good dairy barn, whether it is a stall-for-every-cow type or a loose-run type, needs every laborsaving advantage that can be had, if the farm is going to produce milk to sell on approved markets at highest prices and greatest profits.

The fact that 98 percent or more dairymen follow the plan of a stall-for-every-cow seems to be adequate proof that this time-tested system will continue to get the majority of farm votes when a poll is taken on dairy cattle housing.

When a better housing plan is developed, manufacturers of equipment will be ready with new, laborsaving, sanitary equipment to fit the needs of dairymen and help them produce the best-quality milk to meet consumer demands. **END**

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If Musterole doesn't give you prompt relief — see your doctor. Musterole is sold in 3 strengths.

MUSTEROLE

Our new house is wonderful! (From page 43)

It means good storage, fewer steps!

We planned wardrobe closets for each bedroom to fit the individuals using them. Little Eileen, for example, has adjustable rods in her closet. She can reach them now, and as she grows, the rods will be moved up to match her reach. The drawers are graduated in size so any type article can be stored easily. The folding doors are of washable plastic

The back entry provides immediate access to the main central hall, so no one need track through the main rooms of the house. Walter is shown here in front of the work-clothes closet that's just inside the back door. Next on the left is the workroom, then washroom

My recipe books won't have stains on their pages any more, for now they have a shelf to call home. It's at eye level for easy reading

My serving counter in the kitchen is next to the dining room so linens, china, silver are handy. Pull-out shelves provide extra space

The washroom is near the back entry and has a shower instead of a tub so cleaning up can be a fast, easy job. (More on page 132)

Your bathroom may look clean... yet harbor dangerous germs!

YOU can often scrub a bathroom until it shines and still not get rid of harmful germs ... invisible germs that can endanger family health! Stains, too, can resist ordinary cleaning.

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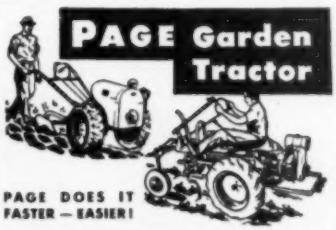

PAGE Garden Tractor

PAGE DOES IT FASTER — EASIER!

New 1950 line with extra features for spring plowing and dozens of other year 'round uses. *Riding* and *walking* models, 2 to 6 HP. Complete gear *with reverse*, no cheap belts or chains. Large tires—easy to handle—*power turn*. New reduced factory prices, **$188 to $440**, with cultivator. Get the benefits of our 25 years' experience!

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QUICK RELIEF. Instantly your eyes feel refreshed. Murine's scientific blend of seven ingredients cleanses and soothes eyes tired from overwork or exposure to sun, wind and dust.

MURINE FOR YOUR EYES

"NO LONGER NERVOUS!"

Switching to Famous Cereal Drink Brings Natural Relief

Jittery?... Irritable? ... Can't enjoy life fully? ... People everywhere—people who once suffered just as you do—have found the answer in switching from coffee and tea to POSTUM.

EXAMPLE: A woman in New York City writes this sincere and moving letter: "My switch to POSTUM has given me a *new lease on life!* I no longer fear the sleepless nights and the nervous tired feeling that made life a bore!"

SCIENTIFIC FACTS: Both coffee and tea contain *caffein*—a drug—a nerve stimulant! So while many people can drink coffee or tea without ill-effect, others suffer nervousness, indigestion, sleepless nights. But POSTUM contains no caffein or other drug—nothing that can possibly cause nervousness, indigestion, sleeplessness!

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Pleasant FOR CHILDREN & GROWN-UPS

When Nature 'forgets' remember

EX-LAX

THE CHOCOLATED LAXATIVE

10¢

Our new house is wonderful! (Storage)

[*From page 131*]

We learned early in marriage that well-planned storage was very important if we were all to keep our sweet tempers. Our architect realized this, too, and he gave us closets and shelves in every possible place. There were brief moments at first when I wondered how and when I'd ever be able to use it all, but I'm finding it's not difficult.

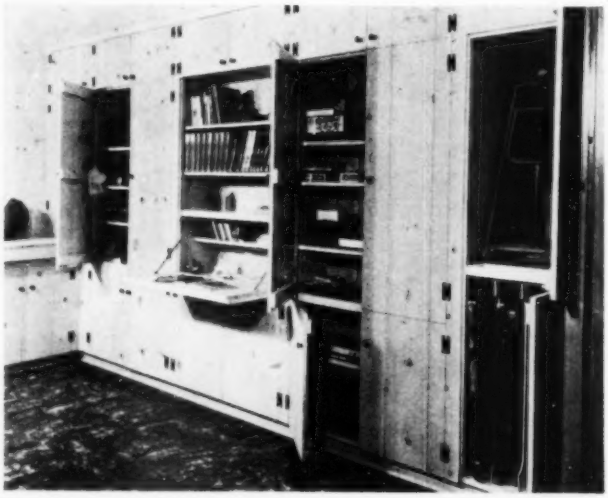
In the central hall there are two full walls of storage cabinets. We use one for blankets, out-of-season clothing, and Christmas decorations. The other holds sports and hobby supplies.

Incidentally, this central hall probably sounds like a lot of wasted space to some people, but I wouldn't trade it for anything. It keeps outside dirt from being tracked into the main rooms of the house and completely eliminates traffic jams. Four children, you know, can cause traffic jams!

My fruit room is at the far end of the back hall, handy to kitchen and workroom. Storage cabinets at left are for sports equipment

This view is from the dining room, through the kitchen, into the workroom. Notice how convenient these rooms are to one another

This long central hall runs from the rear entry to the living room, then right, to the bedroom wing. It provides loads of storage



Our hobby-room storage wall is engineered storage at its best. There's a drop-down desk with adjustable shelves above, toy and game cabinets galore with different-sized shelves, table-and-folding-chair cupboards with racks for stacking each. END

Meet Charlie Tobin — Another "Do-it-yourself" American

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Charles E. Tobin, Jr., Dallas, Texas, knows that nothing need stop a man's carving out a career on his own! He put himself through college, then founded a land-clearing company. It was tough going at first—meeting payrolls and felling timber along a 175-mile right-of-way. But today, with the manpower and machines he needs, he's ready to take on jobs for farmers and contractors. At 30, Charlie's company is in the black. It's filling a need in his community. *And he built it on his own!*

☆ *It's the American Spirit!*

YOU'LL find plenty of folks who feel as Charlie Tobin does . . . on every Main Street! They're the ones with imagination, initiative, and drive. They're opening "new frontiers" of opportunity, not only for themselves—but for others. They're making their own *security*, too. For themselves and their families.

One evidence of this modern American "Do-it-yourself spirit" is this: 4 out of 5 families are voluntarily safeguarding their independence through life insurance. And new thousands are turning to it every day.

To fill these growing needs of men and women in every walk of life, the life insurance business itself must grow.

To some it must bring the satisfaction of knowing last expenses will be paid. To others, security for widows, education for children, or worry-free retirement years.

To do so much for so many, 584 individual life insurance companies are active competitors. Representing them at a personal level are 150,000 trained agents who devote their lives to helping American families *help themselves!*

It's a Fact . . .

It's a fact that the first consideration in making life insurance company investments is safety.

- State Insurance laws specify the kind of investments the 584 competing companies may make.
- These laws are made in the interest of the policyholders.
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- As a result, the greatest part of life insurance assets is invested in the form of bonds and mortgages.

To make sure you are getting the greatest benefit from your own life insurance, see your agent. Life insurance is a *service!* Your agent is trained to help you make the most of it. The Institute of Life Insurance—central source of information—60 East 42nd Street, New York 17, N.Y.

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Favor ideas for parties

By Mrs. Roy Lairmore

Whether you're having a birthday party, a holiday party, a 4-H Club meeting, or a women's club meeting, these party favors will add to the conversation.

They're simple to make with materials you have on hand or those easy to get, and they'll take little of your time. Let the whole family help—it will make them feel more a part of the party.

Pipe cleaners, stick candy, crepe and construction paper, gumdrops, glue or paste, scissors—and ideas—will give you the materials with which to work. The following are just a few suggestions to get you started.

A sweetheart—all ready for a Valentine party. To make it, buy flat lollipops. Paste on heart-shaped eyes and a mouth. For shoes, tie two red paper hearts together at the bottom of the stick. Put a bow of red ribbon under her chin, and twist it around the stick. Stand her in a gumdrop.

The Irish washerwoman. Gather a skirt of green crepe paper and a perky white apron around the top of a candy stick. Form head and shoulders with paper shamrock. Paste pipe-cleaner arms to her shoulders. Fasten stem of shamrock to candy stick with pipe cleaners. Stand in gumdrop.

This Easter cart starts with a marshmallow. Fasten candy mints near the bottom for wheels. Cover top of marshmallow with powdered sugar frosting and sprinkle it with green-colored (use food coloring) coconut. Then nest a fluffy toy chick and three jelly beans in the coconut. Toothpicks glued to the chick's legs and stuck in the marshmallow help the chick to stand.

Small baskets for a May Day party. Use halves of eggshells. Fasten a strip of construction paper to each side to form handle. Glue basket to a pack of flower seeds; float an apple blossom in basket. If you wish, put decorations on the basket with water colors, or dye the eggs with egg coloring before breaking them.

The "cat's out of the bag" for a June announcement party. Start by drawing a cat's head on construction paper. Blow up a small, brown paper sack, then flatten it down to make the bag. Put the cat in the bag, letting only the head show. Your guests must pull the cat from the bag to read the announcement you've written on it.

A witch flies in for a Halloween favor. Drape a clothespin in black crepe paper. Make her arms by curling pipe cleaners around a pencil. Dye her pipe-cleaner broom brown. For her head, dampen a face tissue and roll it in a ball. To make hat, form cone of black paper, fit a brim over the cone. Stand witch in a big gumdrop.

An airplane favor children will love to have. Near the end of a small stick of candy wrapped in cellophane, place two candy mints, one on each side. Put a stick of gum crosswise over the stick of candy. Put a rubber band through the holes of the candy mints and loop each end over the stick of gum to hold it in place. Your favor will please any "birthday child."

A Christmas tree. Draw a pattern and cut two trees from green construction paper. Cut a vertical slot to the center of each tree, starting at the bottom of one tree and the top of the other tree. Dot glue over each side. Next, scatter tiny colored cake candies over the tree. Fit the trees together to form a standing Christmas tree. Hold them together at the top of the tree with four silver-star stickers. END

Building range shelters is rugged-when you feel like this!

BUILDING range shelters is hard work. But it's *worse* when you wake up with a headache, feeling miserable, because you need a laxative.

So remember to always keep Sal Hepatica—the laxative that suits your convenience—handy.

Taken before breakfast, sparkling Sal Hepatica brings you *speedy, gentle* relief—usually within an hour!

At the same time, antacid Sal Hepatica also sweetens a sour stomach by counteracting excess gastric acidity.

Sal Hepatica is a recommended laxative by *more than half* the doctors interviewed in a national survey!

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The Antacid Laxative

A PRODUCT OF BRISTOL-MYERS

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When muscles are stiff and sore from unusual exercise or strain, use **HEET®**, the liniment that's *strong* yet does not burn the skin. Wonderful relief from muscular soreness comes as comforting **HEET** quickly starts to *penetrate*. Just brush it on with the applicator. **HEET** starts at once to ease muscular pain and keeps on working for hours, warms and soothes the painful area.

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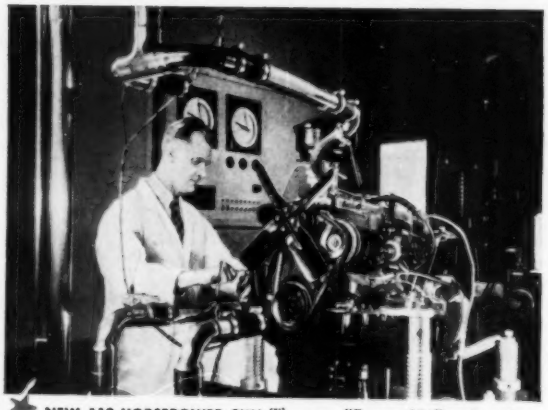

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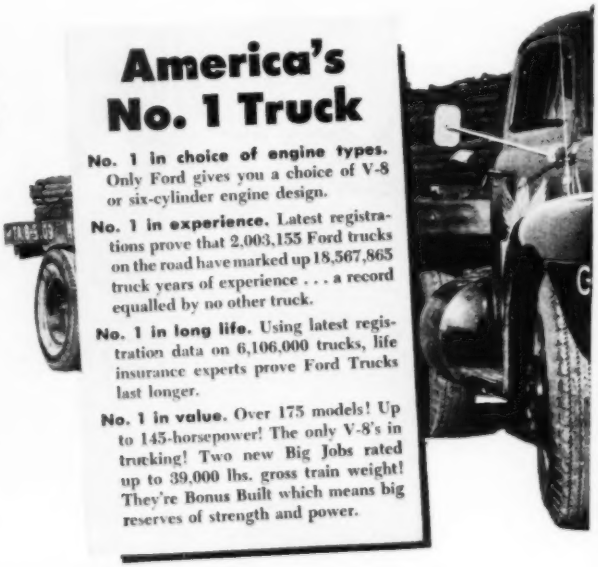

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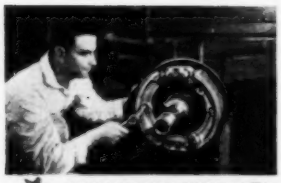

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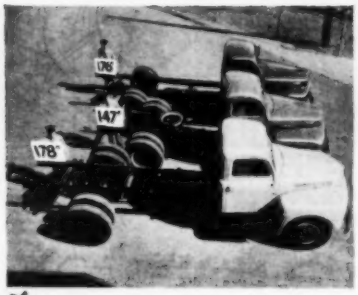

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Model F-7; 19,000 lbs. G.V.W. 35,000 lbs. G.T.W.

Model F-8; 21,500 lbs. G.V.W. 39,000 lbs. G.T.W.

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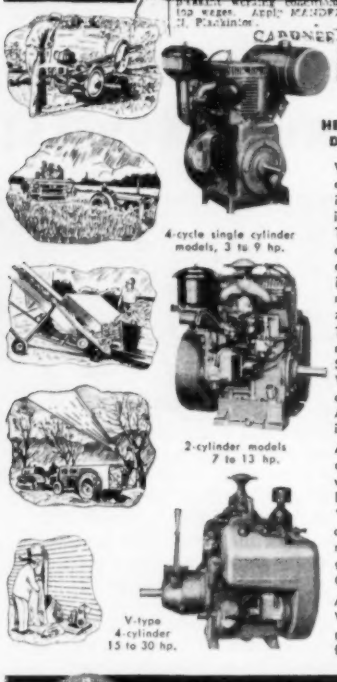

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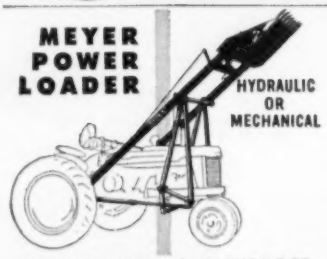

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"No, I'll take the loafing barn"

[*From page 37*]

ramps from the barn floor to his outdoor feed racks and drops bales in from overhead. Many farmers have found that silage, like hay, can be fed once a day with good results.

In a properly built milking parlor, the grain-feeding job is combined with milking. If the grain storage is handy, the job of feeding grain can be done with little extra travel or time.

A pen barn should be cleaned no oftener than the height of walls, piers, and ceiling dictate. Most farmers using pen barns clean three or four times during the winter, but many have sufficient headroom so that an annual cleaning in the spring or perhaps two cleanings a year are all that are required.

It is a prime essential for laborsaving that the pen barn be arranged so a tractor manure loader can be used. Stanchion barns have gutter cleaners to help with the job of cleaning, but the chore of hauling out manure daily in all kinds of weather is neither pleasant nor efficient. Two spreaders and a manure loader can clean almost any barn in a day or two.

Then there's a limit to the speed with which cows can be milked by one man using two single units. Having held a stop watch on the milking job in both parlors and stanchion barns, I am satisfied that the job can be done as rapidly in one as in the other, if good methods are used.

There is, however, some definite advantage in a well-planned milking parlor as far as distance traveled and ease of doing the work are concerned. In the parlor, the cow comes to the machine and brings the milk with her instead of the operator carrying the machine to the cow and carrying the milk back.

Probably one of the most common questions about pen barns is, "What kind of milking parlor should I build?" I have seen almost every kind of milking parlor and have timed the operators in them. I am convinced that there isn't a "best kind" of parlor but that there are several that are good.

When one man can milk 20 to 25 cows per hour with two units and have time to perform the essentials of good milking, such as cleaning the udders, examining for evidence of mastitis and injury, and graining the cows, I wouldn't be too particular about the type of parlor.

My favorite type has four cows abreast, with pits between the outside two cows. The grain storage is located in the front of each pit. The milkhouse is located off the center of the back of the parlor. This parlor is easy for the farmer-carpenter to build. It's inexpensive, compact, and it allows the operator to use an efficient milking routine.

For a really inexpensive parlor, the pits, stalls, and platforms can be omitted. The cows can be held in the stalls by a chain which hooks behind them; but few farmers find it necessary to hook the chain after the cows are trained.

Doors fitted with handy spring catches, which open at the pull of a rope in the pit and are drawn shut with another rope, will save time. If you want to go still further, build overhead grain bins with chutes for delivering grain into the feed-

boxes on the front side of the stall doors.

Although the pit parlor costs more and has little, if any, advantage for speed in milking, it saves much effort on the part of the operator. A man will squat down three to five times per cow per milking in a flat parlor or in stanchions. In milking 20 cows twice a day, a man will squat down between 120 to 200 times per day.

Ernie Ruehs, Caledonia, Michigan, says, "If you don't think that's work, just try to squat down 200 times in a row." Ernie has had experience milking 35 to 50 cows in a flat parlor for almost 20 years. Incidentally, he is now the "dean" of pen-barn enthusiasts in Michigan. Personally, I would recommend that if you plan to milk more than 12 cows you should have a pit parlor.

Some farmers favor washing down the parlor after every milking. I think it's better to cover the floor with lime and sweep after each milking. A washed cement floor dries slowly and it makes an ideal place for bacteria to multiply. There is seldom any manure or urine deposited in the parlor after the cows become used to the routine.

Usable parlor plans can be had from most agricultural colleges, and there are several commercial makes on the market. It's my belief that the type of parlor isn't too important. It's the work methods used in the parlor and other chore jobs around the dairy barn that result in less work and more time saved.

Way back in 1926, the late Professor James R. Dice of the North Dakota Agricultural Experiment Station began a study to prove that dairy cows should be housed in a warm barn during the winter. After several years of experimental work, Professor Dice made this observation: "The idea that dairy cows receiving an adequate ration need to be kept in a warm barn to be comfortable seems to be an assumption rather than a fact."

Similar observations have been made at the University of Wisconsin and other state experiment stations. These observations, along with the experience of many Michigan farmers, lead to the belief that the warm barn is for the comfort of the farmer rather than the cow. By adopting methods which require a minimum of time spent in doing chores, you can have your warm comfort in the farm shop or even in the family living room.

The important by-products of cold housing are better cow health and lower barn building costs. In the cold pen barn, the cost of ventilation and insulation is eliminated. Cows housed in a cold barn, while keeping up a level of production comparable with cows housed in a warm barn, tend to eat more roughage and less grain.

A great amount of heat must be expelled by a cow when roughage is digested. Heat can get away faster in cold surroundings and this may be a factor in the greater appetite for roughage feed. At least that is the general idea expressed by some nutrition specialists. As long as cows like it cold and say so in the milk pail, it makes good sense to avoid charging the herd with high building rent which they pay for under protest.

Leave the barn doors open or, better still, build the barn with the south side open, something like a beef feeding barn. This will sound a little rugged to the dairymen who have been accustomed to

[*Turn to page 140*

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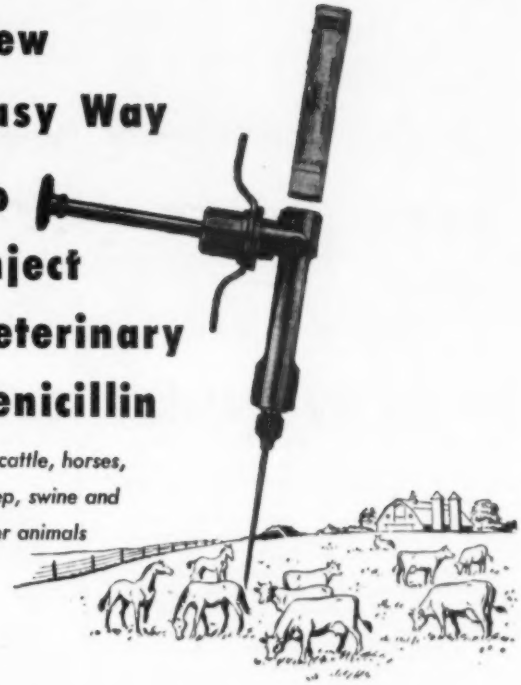

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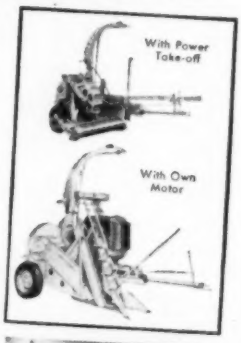

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"No, I'll take the loafing barn"

[*From page 139*]

taking care of their cows in an insulated, electrically ventilated barn. But it can be (and is being) done.

One 5-degree-below-zero morning during the winter of 1948, I visited the farm of Gero Himbaugh, Branch County, Michigan. His herd of 32 Guernseys was fed hay and silage, both in the barn and outside, with room for all to eat at one time. Thirty of the cows were crowded around the outdoor bunks while only two were "smart" enough to come inside to eat under shelter. Cows don't mind the cold weather once they become accustomed to it.

It would be misleading to say that housing dairy cows in a pen barn is without problems. For one thing, most farmers will say that they have varying amounts of trouble with "boss" cows—those cantankerous old girls who seem to enjoy throwing their weight around, particularly in close quarters.

Leaving the bedded area as free as possible from obstructions—places where the "boss" can corner her less-belligerent sisters—will help the situation. It is very

> **When you see a man of worth, think of how you may emulate him. When you see one who is unworthy, examine your own character.**
> —*Confucius*

essential that all cows be well dehorned. Sometimes it becomes necessary to sell a "boss" cow.

One cow should have 75 to 100 square feet of floor space in the barn and perhaps twice that much outdoors. Now, some farmers complain that the pen barn requires too much bedding to make the system practical. Others say the more bedding, the more manure, and consider it advantageous. Bedding requirements and cow cleanliness can be influenced by the layout of the barn. Keeping traffic off the bedded area will make the bedding last longer and the cows will stay cleaner with less effort on your part.

Locate feed racks as far from the bedded area as possible. The ideal place is outdoors or between the bedded area and the exit. Likewise, the water tank should be located near the door or outside, and the tank should be insulated against freezing rather than being placed in the back of the pen. Cows make too many trips to the tank in a day to have them walking across the bedded area for a drink.

If you are thinking of changing to a pen barn for handling dairy cows after using a stanchion barn, keep in mind that you are taking on an entirely different system. You should forget all your old stanchion-barn habits. Keep the cows in a cold pen, feed once a day, bed as much as necessary for sanitation, and milk in a convenient parlor. Keep in mind that 60 to 80 percent of your dairy chore time should be spent in the milking parlor. Make the parlor convenient and keep it clean.

If you follow these pointers, you will soon be a pen-barn dairyman who likes his work because there's less of it. END

News

What's the best green manure?

First-year growth of biennial sweet clover outyielded both red clover and Hubam on the Stanley Stassen farm in Redwood County, Minnesota, in 1948.

The total dry weights, both roots and tops, taken in September were: sweet clover, 4,700 pounds per acre; red clover, 3,200 pounds per acre; and Hubam, 1,700 pounds per acre. The root growth alone on the dry basis was 2,190 pounds per acre for the sweet clover, 1,500 pounds per acre for the red clover, and 600 pounds per acre for the Hubam.

On other farms in the county, the top growth of sweet clover averaged .95 tons per acre on two farms; the red clover .48 tons per acre on five farms; alfalfa .45 tons per acre on two farms; and the Hubam .57 tons per acre on five farms.

All seedings were made in the spring of 1948.—*J. I. Swedberg.*

Soybean-Sudan grass—good emergency hay

Henry Schwartz, Adams County, Indiana, has used a soybean-Sudan grass combination for hay. He has had excellent success. In the spring of 1948, Schwartz found himself without sufficient grass for hay. He needed plenty of it to carry his large herd of cows through the winter months.

Schwartz decided to try soybeans and Sudan grass as a mixture. He prepared the ground in the same manner as for corn, and drilled 2 bushels of soybeans and 10 pounds of Sudan grass seed per acre. He drilled this combination early in June. With plenty of rain, the soybeans and Sudan grass made an immense crop.

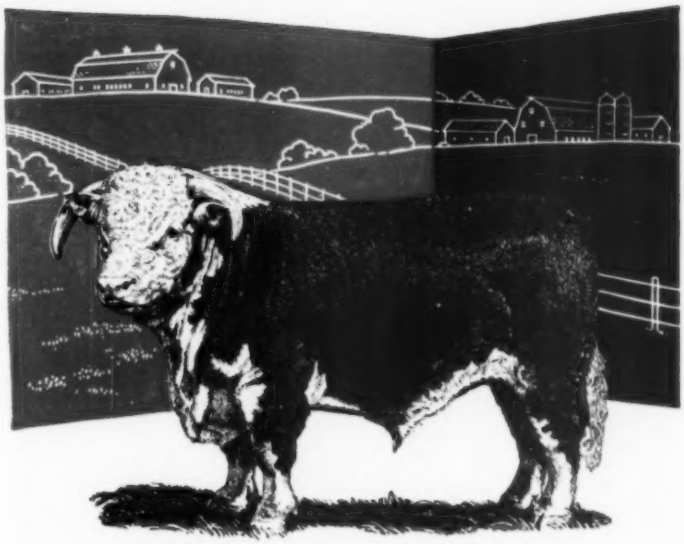
Schwartz cut the combination crop in mid-August, soon after the soybean pods had started. By that time, the Sudan was heading out and he wanted the crop cut before the Sudan became too coarse. The soybeans could have stood another week or two.

The beans and Sudan cured well. Schwartz left the hay on the field about a week, then baled it. It did not shatter very much and made an excellent feed. Schwartz said the cows like it as well as alfalfa and appear to do very well. He recommends it for an emergency hay crop and suggests sowing plenty of fertilizer, because the Sudan grass depletes the ground considerably.—*Simon Schwartz.*

Gets 2-bushel clover seed yield

Last fall, F. E. Dixon and son, Kenneth, Kappa, Illinois, harvested 5 acres of red clover seed that yielded 2 bushels per acre.

The 5 acres had been farmed for some years with a rotation of pasture, corn, oats, and clover. Last year, limestone and phosphate were applied, and the clover was seeded in the oats at the rate of one bushel for the 5 acres. The plot yielded 6 tons of hay in the first cutting, and the second crop gave the 2-bushel-an-acre yield of seed.—*Harry L. Spooner.*



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Your veterinarian is your dependable ally in the constant war against cattle diseases. Consult him for the most effective management practices and disease control procedures to meet your individual needs.

Read carefully the circular enclosed in the package for *best results* in the use of this product.

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Lederle ANIMAL INDUSTRY SECTION

Wonder-working lotion brings new beauty to your WHOLE HAND!

1 SOFTENS CUTICLE. Nails look neater with New Hinds helping to keep cuticle pliable. No ragged edges to "catch." Your manicures stay lovely longer!

2 SMOOTHS KNUCKLES. Dry knuckles yield to the smoothing action of New Hinds. Effective emollients "sink in." Hinds dries fast—never feels sticky!

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WORKS WONDERS! Lanolin-enriched for *extra* effectiveness, New Hinds Honey and Almond Fragrance Cream keeps your *whole hand* feeling soft in spite of ravages of work and water. Use it to smooth elbows, arms and legs...try it as a powder base. Use Hinds to help protect babies' and children's tender skin from chapping! 4 sizes, 10¢ to $1.00.

Hinds Honey and Almond Fragrance Cream

NOW IN NEW LARGER BEAUTY BOTTLE

The new movies

By Betty Camp

Television or not, we'll still take a good movie viewed over a sack of popcorn for our Friday evening entertainment. This month's movies offer something for everyone's taste, be it slapstick comedy or emotional drama.

Strictly for fun and a good bet for the family's enjoyment is the Technicolor musical, **On the Town** (MGM). Crazy-rhythm boys Gene Kelly—who also makes his debut as director—Frank Sinatra, and Jules Munshin show you what three sailors can do in New York on a 24-hour pass.

Lady (?) taxi driver Betty Garrett, who has a crush on Sinatra, provides the boys with bumpy transportation. Ann Miller leads them through a fantastic jungle dance routine in a prehistoric museum. And, with Kelly, Vera-Ellen has ample chance to show her versatile artistry in interpretive dancing, ballet and tap.

The fast action carries you from the subway to the top of Empire State, from gaudy New York night life to tin-horned Coney Island.

On the tear-jerker side is Samuel Goldwyn's production, **My Foolish Heart.** As Eloise, Susan Hayward plays—for the second time—a bored alcoholic. Dana Andrews is adequate in the role of Walt, her college sweetheart.

As the story opens, Eloise's marriage is bound for the rocks because of her selfishness and disregard for her husband (Kent Smith) and precocious child. The reasons behind the trouble are revealed through flash backs of Eloise's life.

Leave the kids at home when you see this one.

Television's favorite child, Milton Berle, lives up to his title of "Public Energy No. 1" in Warner Brothers' **Always Leave Them Laughing.** He plays the role of Kip Cooper, comedy star who has reached success with his own TV show after traveling a rocky road.

Dana Andrews, Susan Hayward carry romantic leads in love story, *My Foolish Heart*

V. Mayo lets Milton Berle know what she thinks of him: *Always Leave Them Laughing*

This plot—such as it is—gives Berle a chance to display his talent as a versatile comedian. And the Broadway showman is that! He sings, dances, does skits and vaudeville routines, plays a ham actor who catches a faceful of catsup, and a Broadway cab driver.

Virginia Mayo, Ruth Roman, Bert Lahr have the supporting roles.

More than 3,000 U. S. Marines helped give authenticity to the script of **Sands of Iwo Jima.** Republic's vivid story of one of the bloodiest battles of the last war.

Picture stars John Wayne as tough Sergeant Stryker, whose ruthless training tactics bring dislike from his men, hate from one idealistic private (John Agar). It's not until the Marines land at Tarawa that Stryker wins their respect through his valiancy. Climax comes with the familiar, moving photograph of flag raising on Mount Suribachi.

Our favorite film this month is Paramount's **Dear Wife,** which continues the human, hilarious adventures of the family group you met in *Dear Ruth.*

Miriam (Mona Freeman), the teen-age kid sister, starts the trouble ball rolling when she campaigns for her new brother-in-law (William Holden) to be state senator, learns too late that he will be running against her father, the Judge (Edward Arnold). Her older sister (Joan Caulfield), as wife and daughter of the two candidates, is placed squarely in the middle of the political tangle. The stuffy banker and friend-of-the-family (Billy De Wolfe) further complicates matters by getting in everyone's hair.

A good choice for the entire family. END

Mona Freeman, teen-age sister in *Dear Wife,* is always where she's not wanted

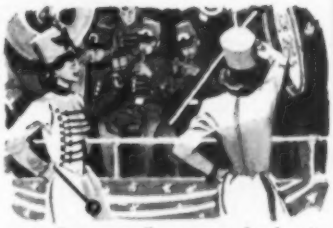
Attractive hair styles in this picture by Don Rito, famous Hollywood Hair Stylist.

Now! Toni with SPIN curlers

twice as easy—twice as fast!

Now it's doubly easy for you to have a flattering Toni Home Permanent. For new patented Toni SPIN Curlers save half the time and work of winding curls. They grip the hair, spin up curls . . . lock with the flick of a finger! No more rubber bands. Fewer curls to wind, for you wind more hair on each curler. And SPIN Curlers fasten curls closer to the head—give you a better, longer-lasting wave.

What's more, with Toni Home Permanent you'll get the most *natural-looking* wave you've ever had! Because Toni Creme Waving Lotion is so different. An exclusive, gentle formula that *coaxes* your hair into **soft,** springy curls. So gentle and fast. No other home permanent waves hair faster yet leaves it so natural looking—so easy to set and style. Jany, on the left, has the Toni.



***At the game** all eyes are on Jany's spinning baton—and her shining, natural-looking curls. Jany says, "The new SPIN Curlers have spin action, too. They grip—spin—and lock with the flick of a finger!"*

Toni Refill $1.00

Special Combination Offer

Refill Kit and complete set SPIN Curlers $3.00 value **Only $2.29**

***Still the center of attraction** at the dance. And Jany knows her hair has a lot to do with it. She says, "Even after a strenuous day, my Toni waves are still in place and look just as soft and natural."*

THE WAVE THAT GIVES THAT NATURAL LOOK — TONI

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for 25 years!"

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CEL-O-GLASS Windows went into this remodeled barn on the Leader farm, which now houses 2,000 breeding hens. It is one of the recent additions which have increased capacity of the farm to 16,000 White Leghorn breeders.

Only CEL-O-GLASS Gives You All These Advantages:

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- **Heavy galvanized steel mesh base.**
- **Quick and easy to install.**
- **Tough, durable, weatherproof.**
- **Can't shatter. Lasts for years.**
- **Attractive appearance.**
- **Helps keep houses warm and dry.**
- **Lets in ultra-violet rays.**

***Many uses**—Quick and easy to install for long-life, sturdy windows in brooder houses, poultry houses, dairy barns, milk houses, hog barns, etc. Fine for porches, storm doors and windows, hot beds, plant protectors, other permanent and emergency uses. Keep a roll on hand—it takes little space—comes in 28-in. or 36-in. widths.*

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CEL-O-GLASS®

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Can you pick the most valuable hog?

[*From page 35*]

Then, using the Chicago carload pork prices for the 12-month period preceding the show, the different grades of cuts were assigned a value. Regardless of how the barrows looked on foot, dollars-and-cents value measured by both yield and grade determined the winner.

Each of the 8 barrows shown here was top for its breed in the contest. Actually, there was a difference of $1.57 per hundredweight between the best and the poorest of these 8 hogs. And of all the 50 barrows entered in the contest, the most valuable one was worth $4.05 a hundred live weight more than the poorest barrow.

In addition to being a judging contest, the Austin meeting helped to answer the question of whether there are two kinds of hogs—(1) the kind that is the most profitable for the farmer to raise and (2) the kind that kills out best for the packer. Can farmers afford to raise the long, meaty type which has the higher value when slaughtered? Can they grow this type as fast and as profitably as the older-style, cob-roller type of lard hog? These questions were largely answered by the fact that the 50 barrows in the carcass contest averaged 217 pounds live weight at less than an average age of 6 months. And that's a good gain in anybody's language.

No one knows better than the farmer how little encouragement hog buyers and packers have given producers to grow and market meaty-type hogs. Any way you look at it, hogs still are priced largely on a weight basis with little consideration for the animal having a larger part of its weight in hams, loins, shoulders, and bacon, and a smaller part in fat and lard.

However, there's promise of a change. This practice of buying hogs on averages soon may be replaced with a system of grading hogs on foot and buying on a quality basis. When this happens, it will pay farmers to give more attention to breeding, feeding, and market weights.

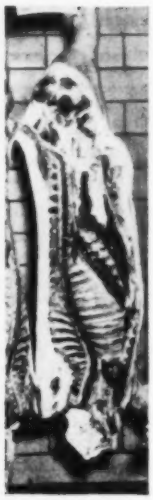
Workers in the United States Department of Agriculture have proposed tentative grades for slaughter hogs, based on length of body or weight, and the thickness of the back fat. The U.S.D.A. says that more experienced buyers can develop a high degree of accuracy in selecting live hogs using this method. Of course, this calls for estimating length or weight as well as back-fat thickness.

But packer buyers, who are willing to admit the present system of pricing hogs isn't everything it should be, say it is surprising how close good buyers can come to these estimates. This new system of grading hogs still is experimental, but it has the interest of a number of interior packers as well as that of a progressive major packing concern with headquarters in Chicago.

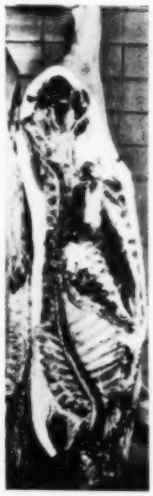
Most farmers are the first to point out that a change in pricing market hogs will do most to encourage the breeding of better-quality hogs and the marketing at lighter weights with less fat. They are willing to make their contribution to swine improvement whenever the marketing agencies are able and willing to recognize quality and to pay for it.

You probably find yourself in the same boat. But, for the present, how *did* you come out in that barrow judging? END

First, No. 45
Berkshire. Weight: 215½ pounds. Length: 30½ inches. Placed 1st at Austin. Back fat: 1.4 inches. Dressed 71.0 percent. Lean meat: 42.4 percent of live weight. Fat trimmings: 10.4 percent. Live value $23.41 per hundred.



Second, No. 32
Hampshire. Weight: 205 pounds. Length: 29½ inches. Placed 2nd at Austin. Back fat: 1.5 inches. Dressed 71.7 percent. Lean meat: 39.1 percent of live weight. Fat trimmings: 13.0 percent. Live value $23.02 per hundred.



Third, No. 21
Tamworth. Weight: 225 pounds. Length: 33 inches. Placed 4th at Austin. Back fat: 1.6 inches. Dressed 70.2 percent. Lean meat: 39.1 percent of live weight. Fat trimmings: 11.8 percent. Live value $22.73 per hundred.

Fourth, No. 13
Poland. Weight: 214 pounds. Length: 29¼ inches. Placed 5th at Austin. Back fat: 1.3 inches. Dressed 71.5 percent. Lean meat: 37.8 percent of live weight. Fat trimmings: 13.3 percent. Live value $22.47 per hundred.

Fifth, No. 44
Duroc. Weight: 213½ pounds. Length: 28 inches. Placed 6th at Austin. Back fat: 1.5 inches. Dressed 70.3 percent. Lean meat: 39.2 percent of live weight. Fat trimmings: 12.8 percent. Live value $22.44 per hundred.

Sixth, No. 3
Crossbred. Weight: 223 pounds. Length: 29¾ inches. Placed 13th at Austin. Back fat: 1.3 inches. Dressed 69.1 percent. Lean meat: 37.3 percent of live weight. Fat trimmings: 12.3 percent. Live value $22.00 per hundred.

Seventh, No. 19
Yorkshire. Weight: 224½ pounds. Length: 32 inches. Placed 16th at Austin. Back fat: 1.9 inches. Dressed 71.3 percent. Lean meat: 35.9 percent of live weight. Fat trimmings: 16.1 percent. Live value $21.94 per hundred.

Eighth, No. 36
Chester. Weight: 206½ pounds. Length: 29 inches. Placed 19th at Austin. Back fat: 1.9 inches. Dressed 70.7 percent. Lean meat: 36.6 percent of live weight. Fat trimmings: 15.1 percent. Live value $21.84 per hundred. END

FARROW HEAVY PIGS
weighing up to 3-3½ lbs!

Build big pigs in sows before farrowing with
FUL-O-PEP PIG-N-SOW Feed!

• Big, husky 3 to 3½-lb. pigs at farrowing . . . those are the kind that *get ready for market early.* Those are the kind many Ful-O-Pep feeders get, too . . . for Ful-O-Pep Pig-N-Sow Feed and grain helps build heavy, healthy pigs in sows that *live and grow fast!*

You see, Ful-O-Pep Pig-N-Sow Feed is *stepped up* with the amazing new Animal Protein Factor Concentrate . . . plus choice animal, fish and vegetable proteins sows need to *develop big embryo pigs.*

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So start feeding your sows Ful-O-Pep Pig-N-Sow Feed with your grain now! It makes a balanced, low-cost gestation ration . . . it pays off in the farrowing pen!

Plan to visit your local Ful-O-Pep Dealer soon. For remember . . . you can always depend on Ful-O-Pep Feeds to give you top results!

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These sows are hay-burners

John Keller (picture) and others are getting better results by feeding huge amounts of alfalfa to brood sows

By C. E. Hughes

You can't turn sows into cows, but a few farmers are trying. Somewhere along the line they know they'll have to stop; but, in the process, these men are finding that this single-stomached animal can handle a lot more hay than we previously thought possible. And several of the experiment stations are reaching similar conclusions.

Let's start with John Keller (shown above), for his experience and observations are quite typical. Last winter, on his farm in Cass County, Michigan, he fed nearly 50 percent (by bulk) of alfalfa-red clover-timothy hay to his Duroc sows. Now, Keller wonders whether he might go up to 75 percent.

Here are some of the advantages which he credits to this sort of a feeding program: It helps him to make use of the grass and legumes grown under a soil-conservation type of farming. In the years ahead, more and more farmers will be looking for a profitable outlet for roughage as they cut the proportion of their row crops and step up the acreages of pasture and hay.

Of the 94 tillable acres on Keller's 120-acre farm, he keeps about 40 in hay and pasture. With a rotation of corn, corn, oats, one year of hay, and one year of pasture, his land constantly has grown more productive.

Feed savings are another advantage. Keller has no exact figures, but he thinks that grass and hay together cut his feed bill 25 to 30 percent. He said that he ran 30 brood sows through the winter on this high-roughage ration and "it didn't seem to hurt the grain bin too much."

Pigs farrowed by these sows seemed thriftier. They appeared to be less troubled with scours and worms than when fed a more concentrated ration.

Labor is saved, for he can self-feed his sows and gilts—and they won't grow overly fat. He said he couldn't get by with self-feeding if the sows were given a concentrated grain feed.

Keller believes that his hogs are less lardy when fed considerable amounts of grass and hay. He feels that this may be a partial solution to the lard problem, which is receiving so much attention today.

Here's how Keller handles his grass and hay program with sows: Starting shortly after breeding, he puts them on a ration containing about 10 percent (by bulk) of the ground alfalfa-red clover-timothy hay. After two weeks, the hay part is stepped up to 20 percent, and, two weeks later, the proportion is jumped to nearly 50 percent. By that time, the grain-and-hay part of the ration consists of 50 percent hay, 30 oats, 15 corn, and 5 of barley.

To each ton of this mixture he adds 100 pounds of soybean meal and 100 of tankage. Keller also provides a commercial mineral mixture, including trace elements and niacin yeast. Bonemeal and salt are fed free-choice.

Sows continue to get the 50-percent hay ration from their fourth week of pregnancy till about three weeks before farrowing. Then the proportion is cut to 30 percent, and the amounts of corn and oats are increased.

This 30-percent ration is continued even after the sows go to pasture. Pigs, after they are two or three days old, have access to creeps, where rolled oats are provided. [*Turn to page 148*

Announcing- ALL NEW, ALL PROVED
INTERNATIONAL TRUCKS

Heavy-Duty Engineered to save you money

The new International Trucks are ready for you!

And they are heavy-duty engineered for farm work. That means extra value is built in where it counts most. For 18 straight years Internationals have led in the sale of heavy-duty trucks (16,001 lbs. and over, gross vehicle weight). The men who buy heavy-duty trucks are cost-conscious, profit-minded. They buy on performance. They choose Internationals.

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PREMIUM
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These sows are hay-burners

[*From page 146*]

The pigs are also allowed to eat from self-feeders with the sows.

Keller said that he wanted to make it clear that this kind of a sow ration won't work so well unless the hay is of good quality. He uses only mow-cured hay.

As to hay quality, Keller has been running a few tests of his own. One side of his barn is equipped for mow drying, while the mow on the other side of the driveway is the usual kind. He puts the dampest, most unpromising hay on the mow-drying side but claims that, after treatment, it is worth $15 a ton more (based on last winter's prices) than the hay on the untreated side.

Keller figures the mow-drying process costs about 75 cents a ton. He keeps the blower running for about 10 days.

Russell Jones is another Cass County farmer who is sold on the hay method of feeding pregnant sows. Two years ago, he gave them just 20 percent (by weight) of alfalfa meal in the total ration. The following year he raised the percentage to 33 percent, and last year it ran between 40 and 50.

Here is the ration he fed his sows last winter: 450 pounds alfalfa meal, 350 oats, 100 barley, 65 meat scraps, 65 soybean meal, 5 salt (with trace minerals), 10 bonemeal, and 10 ground limestone.

Jones, like Keller, finds that hogs can be a more important market for grass and hay than most people realize. He bought a run-down, 80-acre farm two years ago and now is carrying on a conservation program to build up fertility. He thinks that hogs and sheep will help make profitable use of the roughage.

Bernard Collins, Wright County, Iowa, is another hog raiser who finds that he can get pretty close to the 50-percent mark on hay feeding. In the winter, he self-feeds his brood sows the following ration: 900 pounds ground alfalfa, 900 oats, and 200 protein supplement. The supplement is composed of 100 pounds tankage, 50 linseed meal, and 50 soybean meal.

Collins also hand-feeds his pregnant sows a little ear corn each morning. This gives him a chance to check up on how well they are doing.

Like the other hog raisers previously mentioned, Collins started this hay-feeding practice on a more conservative scale. The first year, he tried only 33 percent for gilts and 40 percent for sows. Now the proportion runs pretty close to 45 percent (by weight).

Collins thinks that his pigs have been thriftier since he started shoving more hay to the brood sows. If the pigs actually are less troubled with worms, Collins thinks that it is due to this greater thriftiness.

Next winter, Collins is expecting to try grass silage in sow feeding.

Frank Allington and son, Gage County, Nebraska, self-fed a ration containing 50 percent (by bulk) of brome-alfalfa hay to 135 sows and gilts. These men fully agree with the other feeders that this sort of ration keeps sows in better condition during the gestation period. They now are saving between 7 and 8 pigs per litter.

One or two of the state experiment

stations have gone practically as far as some of the farmers on the extent of hay feeding to sows. Other experiment station and college authorities are skeptical as to the practical possibilities of exceeding 25 to 30 percent. Some of them also question whether feeding of legume hay to brood sows has any particular effect, one way or the other, on worm infestation or scours among the pigs which are farrowed.

While brood sows afford about the best outlet for roughage, other classes of hogs can use more than most people think. What's happening in this respect will be discussed more fully in an early issue of *Successful Farming*. **END**

New egg washer

works fast, but gently

Professor James M. Gwin, of the University of Maryland Poultry Department, has invented a new-type egg washer which cleans from 600 to 700 eggs an hour. The machine is expected to solve the washing problems of the small and medium poultry producers.

An accident with a carpenter's square gave Professor Gwin the new egg-cleaning idea. While experimenting with a conventional egg-washing machine recently, he happened to make a measurement with a carpenter's square while the machine was running. He noticed that an egg which scraped against the square was cleaned. This led him to believe that dirt could be scraped off the eggs quicker than with the previously used brushes. So he developed the scraper mechanism for his washer. Here's how the gadget works:

The washing is done by a motor-driven canvas belt, which passes through a tray of electricially heated water before going under the eggs. The water, which is kept warmer than the eggs, moistens the eggs. The difference in temperature produces an "outward pressure" which helps remove the dirt. As the wet belt passes under the eggs, it twists and turns them in individual compartments made of metal bars. These bars scrape off the dirt.

Professor Gwin explained that the washing action is so gentle that cracked eggs may be washed without breaking. The eggs aren't shaken up much because they turn on their short axis. The water is heated by an electrical unit that turns on when the machine is plugged into an electric outlet.

The machine, Professor Gwin claims, is capable of handling the normal output of soiled eggs from a flock of 2,000 birds in about 20 minutes. It cleans 36 eggs at one time.—*William Krch.*

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due to bruised teats, scab teats, obstructions
—treat them with
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CONTAIN SULFATHIAZOLE—Dr. Naylor Dilators act as medicated surgical dressings to the teat canal. The medication is IN the Dilators. They help combat infection and relieve tension by applying sustained antiseptic contact directly at site of trouble.

EASY TO USE—Simply keep a Dr. Naylor Dilator in the teat between milkings until teat milks free by hand. Fit large or small teats. Easy to insert. Stay in the teat.

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SILBAUGH MFG. CO. Humboldt, Iowa

Self-feeding hay-storage building

By D. H. Vincent

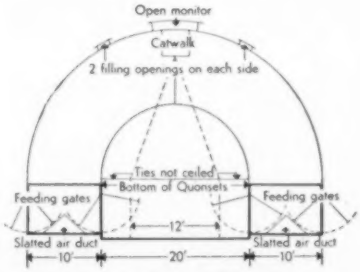
The backbreaking job of feeding hay after it has been put in the barn may be a thing of the past. Paul M. Mazur, farm owner, and agricultural engineers at Rutgers University have worked out a building which eliminates the pitchfork when feeding hay.

The self-feeding building on the Mazur farm consists of a 20′ wide Quonset building within a 40′ wide Quonset. Both buildings are supported on 8′ columns. The inner structure is used as a plenum chamber for drying the hay in the 10′ wide bins. The dryer is connected to the end of the building as shown in the picture below, and heated air is blown through the stored hay. After picking up moisture, the air is discharged through ventilators in the roof of the building.

After testing, the engineers decided the building should have 14′ storage bins and a 12′ feeding and housing space in the center for maximum efficiency. The shape of the proposed inner structure is shown by the dotted lines in the drawing at the bottom of this page.

Feeding gates, both inside and outside, consist of 2″x2″ oak bars. The bars are hinged at the top and fastened together at the bottom with a chain. When cattle eat, they push the gates inward to get at the hay. As the hay is eaten, more falls down. The slatted air ducts in the center of the 10′ wide storage bins are used for drying and also help keep the hay within reach of the cattle. END

Quonset, above, is 40′ wide with a 20′ wide Quonset inside for a plenum chamber



Drawing is of Quonset building above. Dotted line indicates the proposed changes

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1. An official entry blank must be used, obtainable from your Louden dealer or address below. Complete in 50 additional words or less the following sentence: "We need a scientifically designed, all-steel, prefabricated Louden Hi-Dri Hay Drier on our farm because . . ." Decorated entries will not be considered.
2. All entries become property of The Louden Machinery Co. None will be returned.
3. Entries will be judged on originality, aptness of thought, neatness, uniqueness of idea, sincerity, logic, etc., and the decisions of the judges will be final.
4. In case of ties, duplicate prizes will be awarded.
5. Contest closes Saturday, Feb. 18. All entries must be postmarked before midnight Feb. 18, to be considered.
6. Winners will be notified not later than March 1. A complete list of all winners will be mailed to anyone sending a self-addressed stamped envelope after contest closes.
7. The contest is subject to all State and Federal laws.
8. Any person owning or living on a farm in the continental United States may compete, except employees of The Louden Machinery Company, its advertising agency, and their families.

105 BIG PRIZES . . awarded as follows:

For the best entry from each of the four sections shown on map at left, an 1800 sq. ft. capacity Hi-Dri, delivered to winner's depot, with AEROVENT FAN, WESTINGHOUSE LIFE-LINE MOTOR (factory lubricated for life) and controls — Value $1,211.75 ea. . . . . $ 4,847.00

To the 101 next best entries, including the best entry from each state, a $250 Hi-Dri Credit Certificate, for use in purchasing an 1800 sq. ft. capacity, or larger, Hi-Dri 25,250.00

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See your Louden dealer, or WRITE TODAY for contest blank, Hi-Dri savings and cost analysis, contest hints and suggestions. Get information about all barn equipment bearing the name Louden — first in barn equipment since 1867. If you don't know your dealer's name, write address below.

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What midwinter means to the poultry raiser

Getting restless sitting around the hot stove looking at your seed catalog? Think you've done about all you can do just now toward improving things in the hen house? Then there's nothing to keep you from making plans now for the approaching chick season.

Early chicks pay best. To show how profitable early brooding can be, Tennessee poultry specialists made up a 5-year record of egg prices received by demonstration flockowners in that state.

The average price for the 5-year period reached a peak in December and hit bottom in May. The May average was 36 cents; with June, 38; July, 39; August, 44; September, 49; October, 55; November, 57; and December, 58 cents. The average dropped back to 48 cents in January and declined steadily through May.

What's the best brooder? Got your brooder in condition, or do you need a new one? You hear a lot of argument over the best type to get—oil, electric, or some other kind.

So far as oil or electric is concerned, there's little difference in average chick losses occurring during their use, according to W. R. Whitfield, poultry extension specialist at Iowa State College. This statement is based on a 2-year summary from Iowa Demonstration Flock reports.

This report shows that users of electric brooders had 6.7 percent mortality, while users of oil brooders lost 8 percent. Not enough coal, wood, or gas-burning brooders were reported to provide a summary of results.

Proof that crowding is costly. Then there's that matter of space. You've heard it before, but it's worth repeating.

Here's money-wise proof of what it costs you when you overcrowd a brooder house: Reports from the Iowa Demonstration Flocks were divided into two groups. One group was made up of flocks enjoying adequate space—with ½ square foot of floor, 2 inches of feeder room, and ½ inch of drinking space per chick. The second group was made up of cases where less space was provided.

Here's what happened up to 8 weeks of age: Nearly three times as much death loss was suffered in the crowded group as among those enjoying more ample space. The higher mortality resulted in their costing 4 cents more per chick than the

uncrowded ones. The 20 percent greater feed requirement per pound of gain among the crowded chicks resulted in 15 cents additional cost for each 3-pound bird raised.

All this was happening while the flock-owners were saving 1 or maybe 2 cents on housing and fuel. This doesn't allow for the poorer finish resulting from crowding, the lower grade of the cockerels produced, nor the reduced egg production of the pullets.

Large brooder houses cost less. Joe W. Sicer, extension poultryman at Purdue University, recommends the use of large, permanently located brooder houses. Sicer points out that the tendency among farmers is to keep flocks of 300 or more hens. Flocks of this size make it worthwhile to provide good equipment.

Sicer explains that a permanent, 14'x30' brooder house can be built for less than the cost of three 10'x12' colony brooder houses. Less heat is needed for one large house, and less time is required to care for the chicks when all are in the same building.

In addition, such a house makes it easier on the poultry raiser. He is not exposed to blasts of cold air in going from house to house in winter or early-spring brooding, and many steps are saved. When the chicks reach 8 to 12 weeks of age, depending upon the time of year, they can be moved to range and put in range shelters.

However, if a permanent brooder house is used, the chicks should not be allowed to run on contaminated ground. Some poultrymen build gravel yards; others use a wire-covered sun porch, or even pull the range shelters in and attach them to the brooder house to use as a sun porch until the pullets go to range.

The permanent type of brooder house can be used almost the year around. Perhaps after the regular pullets have gone to range, it can be used for brooding broilers.

If more pullets are raised than can be housed in the regular laying house, the excess pullets can be held in the brooder house. Later, after culling has reduced the size of the regular pullet flock, the excess pullets can be moved to the laying house.

What about litter? Something you don't want to be stingy with is litter. Keeping plenty of it on brooder house floors helps prevent some poultry diseases and also aids in control of cannibalism. Mahlon Sweet, poultry specialist at Ohio State University, stresses the point that deep litter in the brooder house helps keep the floor warm and dry.

The litter should be built up to a depth of 4 or 5 inches. Many available materials make good litter, including crushed corncobs, sawdust, shavings, chopped straw, peatmoss, shredded cane, and shredded cornstalks. In addition, there's a long list of commercial litters such as treated cottonseed hulls and certain mineral litters.

How much feed chicks take. Here's an easy way to figure about how many pounds of feed will be needed for each 100 chicks. One hundred baby chicks will eat about 10 pounds of mash the first week and 20 pounds the second. The chicks will eat 10 pounds more each week thereafter until they are 10 weeks of age.

Usually the total feed consumption

[*Turn to page 154*

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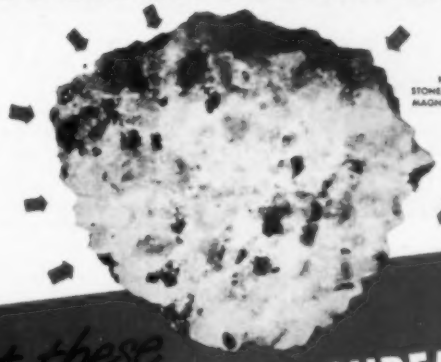

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When you need poultry medicines, ask for

Dr. SALSBURY'S

February poultry pointers

[*From page 153*]

may run somewhat higher than the final figure arrived at by this formula, due perhaps to waste from filling feeders too full, using the wrong kind of feeder, and so forth. However, this should give you a good idea of the total feed needed.

A trick that worked. It's pretty cold these days trying to fix up anything in the hen house, but here's a little trick used by Mr. and Mrs. J. C. Bennett, King City, Missouri, to make their poultry raising more profitable.

Three years ago, when remodeling an old, shed-type 12'x30' house into one 30'x30' structure, the Bennetts built new nests and hung them on the back wall. The nests opened to the front. But the hens wouldn't use the nests because they apparently were not dark enough.

So the Bennetts hung a sack curtain across the front, 2 or 3 feet away from the nests. The sack curtains were attached to the ceiling and extended almost to the floor. This arrangement darkened the nests, and the hens quickly started using them—and quit laying on the floor.

Two experiences with Newcastle. Two flocks in Kansas had Newcastle disease, and records were kept on how rapidly their egg production dropped and speed of recovery they made. Here's the story:

One flock of 800 White Rock pullets began laying the week of August 22 and reached a peak of 63-percent production the week of September 3-10. By the week of November 7-14, egg production had dropped to 38 percent. However, egg production was below 50 percent for only 4 weeks, and mortality ran less than 5 percent.

Things didn't go quite so well with a flock of 110 Austra-White pullets. They started laying about the same time as the Rocks and coasted along just under 50 percent until the week ending January 2, when they laid 49 percent. Then egg production slipped to 41 percent the next week and tumbled clear to zero the week following.

Recovery in this flock was slower than with the Rocks. By weeks, beginning January 16, egg production ran 2.5, 6.1, 15.7, 41.8, and 65.6 percent, the last being for the week of February 20. None of the birds died, but three were culled.

Even though mortality was low and return to normal production was fairly quick, the Newcastle outbreaks cost the flockowners quite a bit of cash. **END**

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48 leading stores offer you special help with your furnishing and decorating problems

They are the stores listed on page 30. They are cooperating with *Successful Farming* to bring you farm home plans, remodeling and decorating ideas. Turn to page 30 for the store nearest you.

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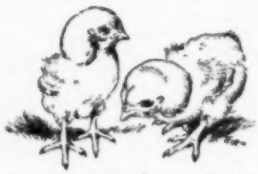

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Radiant heat

does wonders for chicks

By R. U. Blasingame
Pennsylvania State College

Mark H. Witmer, Pennsylvania poultryman, recently built a 3-story concrete-block poultry house, 150'x20'. In this building, he installed radiant heat on the first floor. He starts between 4,000 and 5,000 chicks on this floor every 7 weeks, moving the chicks out and separating the sexes at 6 weeks.

Witmer uses a wide-feed water boiler in this radiant heat job. A pump circulates the hot water and is controlled by thermostats in the floor.

"We originally brooded chicks on this floor with electric brooders by the use of radiators which boosted the room temperature to 70 degrees," Mr. Witmer reports. "We had trouble with dampness, and the setup didn't work right.

"About two years ago, we installed this radiant heat in the floor and have started a group of chicks every 7 weeks since then. This has worked well. We always have dry litter; no crowding. The chicks feather nicely.

"Here is how we built our system: In the back half of the pens, we placed $\frac{3}{4}''$ wrought-iron pipes 1' apart. In the front half of the room, we placed these same pipes 18" apart. This gives us a difference in temperature between front and back of a little more than 10 degrees. After we had laid the pipes on the old floor, we covered them with sand and put 2" of concrete on the top.

"At first, we brooded chicks at a 92-degree temperature on the floor in the back of the room, and about 10 degrees less in the front. We always penned the chicks in the back for the first 10 days. We gradually have been dropping this temperature. We started the last group at about 85 degrees, with good results."

Mulched apple trees bear every year

Do you often get a big apple crop one year and none the next? Well, here's a tip! The Indiana Agricultural Experiment Station says mulched apple trees tend to bear annually instead of every other year. The trees bloom moderately. There's a fairly good fruit set every year.

Reporting on a continuing experiment, the Indiana research workers state that their Grimes trees, in sod and mulched, have been leaders in production. The mulch used was a mixture of straw, shavings, and manure. Strawy manure would probably work quite well if it is kept in a loose condition.—*Don L. Helt.*

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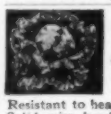

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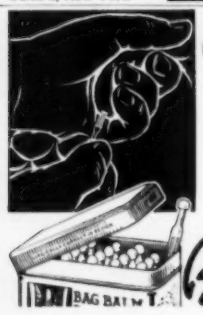

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The author visited farmers in three states to get their experiences. All except one gave a favorable report

By Harold Severson

Are you on the fence regarding grass silage? Hesitating to make the change-over from corn silage because your cows might not like ensiled pasture? Heard too many conflicting reports about this method of putting up grass?

As you have, I've heard some farmers declare, "Never again!" after trying grass silage for one winter. Why? "Because my cows didn't like it." Or, "Too much of it was spoiled when I opened the silo last fall."

Fed it 10 years. I mentioned those comments to Paul Montavon of De Kalb County, Illinois, whose fine herd of grade Holsteins averages between 430 and 460 pounds of butterfat annually. Paul has been feeding hay-crop silage for 10 years and in a county where more than 600 silos are filled with it.

"We're prejudiced in favor of grass silage on this farm," he explains, "because we want to use up the hay we're getting from our 75 acres of alfalfa. The first cutting of alfalfa is generally coarse and inferior, and the only way we can make use of it is to put it into the silo."

Montavon believes his cows are in better health than they would be if fed corn ensilage. "Less udder trouble," he declares, "and our young stock will grow better on grass ensilage than they would on corn ensilage."

How to put up. Paul declares that, even though he has been putting up grass silage for the past 10 years, he doesn't know all the answers to the question of how to ensile it.

"When you get your hay crop ensiled properly," he asserts, "cows will eat it ahead of corn silage. At its best, grass silage is a light, golden-brown color, not a greenish or blackish brown. It has a pleasant, aromatic smell—not a smell that drives visitors away."

Montavon asserts the secret of success in ensiling a crop of legumes or grass is to cut the crop at the right time and to put it into the silo properly. He cuts his alfalfa just as the legume begins to bloom and sometimes just before it does. If cut early, he warns, the alfalfa must be wilted a day or for at least a couple of hours. He uses ground shelled corn as a preservative, putting about 400 bushels into a silo which is 14 feet in diameter and 42 feet tall.

Fred J. Halstead, Waseca County,

Minnesota, reports that his cows really like grass silage. It's a straight alfalfa silage which he used as a feed during the dry summer to supplement the scant pastures. He will begin feeding it sometime in February and continue with the grass silage until pastures green up and become good enough to handle the cows.

Halstead feeds the grass silage as he would corn silage. He gives each cow about 25 pounds at 9 o'clock in the morning. No silage is fed in the afternoon or night. He reports the cows usually have the silage cleaned up by noon.

What science finds. Over at Madison, Wisconsin, Dr. Gustav Bohstedt of the University of Wisconsin's Department of Animal Husbandry points out that grass silage's high protein and carotene (from which Vitamin A is derived) content makes it a little better suited to dairy animals than to meat animals.

"Carotene and proteins are two essentials in the production of milk," he declares. "Holsteins take to grass silage very well. Milk production is stimulated by grass silage."

The Vitamin A from the carotene in grass silage is helpful to cows which are closely confined during the winter months. Furthermore, calves which are dropped in the spring seem to have less scours and grow better if their mothers have received feed which provided a reasonable amount of Vitamin A.

Another farmer's experience. Al Schumann of Olmstead County, Minnesota, finds that grass silage enables him to eliminate supplements from his dairy rations and yet the milk flow continues to hold up well. He thinks this is due to the high protein content of the silage. He does increase the amount of shelled corn fed, however.

Like Halstead, Schumann feeds only in the morning, giving each cow from 20 to 30 pounds. He finds that his cows don't clean this up quite so rapidly as they would corn silage, but the milk flow holds up very well. Schumann's silage is mostly alfalfa, with some brome, and is put up without a preservative. It is wilted about two hours before being ensiled.

Sweet clover warning. Doctor Bohstedt advises against wilting sweet clover if the farmer plans to ensile this legume. He points out that the same poisonous compound (dicoumarin), which is formed when sweet clover hay spoils, crops up when sweet clover silage is not put up properly. Sweet clover disease causes the blood of cattle to lose its power to clot, resulting in young cattle's dying of internal hemorrhages or bleeding to death from relatively minor cuts or wounds.

By ensiling sweet clover hay that has undergone very little wilting, a farmer will have a silage that his cattle will relish and do well on. This is especially true of first-cutting sweet clover.

Tried several preservatives. Over at the nationally known Pabst Farms near Oconomowoc, Wisconsin, Manager Sylvester Weiler is using corn molasses as a preservative on alfalfa-brome silage. This was added at the rate of 60 pounds to the ton. Last year whey powder was used, and this silage also was relished by the cows.

Mr. Weiler relates an interesting experience in which corncob meal, added

[*Turn to page 158*

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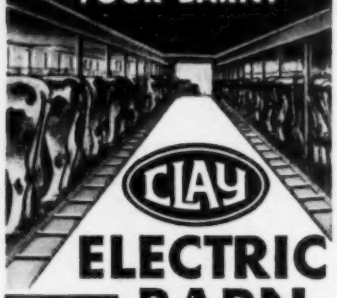

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Here's how grass silage works

[*From page 157*]

at the rate of 200 pounds to the ton, was used to preserve the ensilage. The cows seemed to relish the silage, eating it eagerly. Then they suddenly balked, refusing to touch the silage. Puzzled, Weiler looked up the records and found that the first four feet at the bottom of the silo had been put up without a preservative of any kind.

Some objection. Weiler, however, has found that his cows prefer corn silage to grass silage. Moreover, another objection to grass silage is that it often has a strong and disagreeable odor which is disliked by visitors, particularly women accompanying their husbands to the barn. Because the Pabst Farms sell a great deal of breeding stock, this factor looms large in Mr. Weiler's eyes.

Grass silage should be put up when the alfalfa-brome mixture is still succulent, Mr. Weiler advises. He cuts it when the crop is about knee-high—from 15 to 16 inches in length. The silage is fed twice one day and only once the following day, corn silage going to the cows on the other day.

The important role of grass silage in soil conservation is stressed by Copeland Green of the Brook Lawn Farm at Genesee, Wisconsin. Milking about 280 cows, this big dairy has worked out a program which finds corn silage and hay being fed to the cows in the morning and grass silage and grain at night.

Fits soil-saving program. "We like grass silage on this farm," declares Mr. Green. "We get a tremendous saving in the labor department, for grasses and legumes do not have to be cultivated as would a corn crop. We put up about 700 tons of grass silage in comparison with only 300 tons of corn silage.

"This is perfect alfalfa country, so why bother with corn when the cattle like a hay-crop ensilage, thrive on it, and give plenty of milk. Moreover, we're not troubled with sheet or gully erosion."

Works in beef herds. Over in De Kalb County, Illinois, we talked with several large-scale cattle feeders. One of them is C. B. Watson, who started feeding this type of silage to his steers about three years ago.

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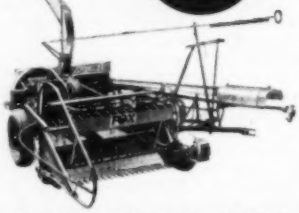

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"We like this silage a lot," he declares flatly. "We put in the first and second cutting of alfalfa-and-brome and never had any difficulty in getting cattle to eat it. They like even the poorer grades of silage."

Mr. Watson puts up his alfalfa-brome silage without any preservative and finds that, by wilting it down to about 60 or 65 percent, he gets a good quality. His cattle get the silage in bunks with a limited amount of ear corn. He noticed that, after he stopped feeding grass silage, his cattle lost their hair bloom on a diet of chopped field corn.

"We think this grass silage is fine for carrying little calves," Mr. Watson said. "It's much better than corn silage."

Preston Woods, another feeder in De Kalb County, is also thoroughly sold on grass silage, wintering between 150 and 200 white-faces on grass silage and hay with a small amount of ground ear corn.

"Give us another two years and there will be plenty of grass silage put up in this county," declares Willard Cook of De Kalb County, a supervisor of the local soil conservation district. "On our farms we've got rolling land that should be tied down with grasses and legumes. That's why this hay-crop ensilage is so handy.

"And once farmers get the knack of ensiling grasses and legumes, you'll find fewer of them grumbling about the silage spoiling on them. It has to be done right. You can't string out the silo-filling job over a couple of weeks by putting in a dab now and then. Do that and you will run into spoilage."

Fred Halstead, the Minnesota dairyman mentioned earlier, says the loss of nutrients is usually less when a hay crop is made into silage. He has found that the best results are usually obtained when hay-crop silage is fed together with hay, instead of being the only roughage fed the cows. And, of course, feeding the grass silage to his cows means that less protein is needed in the concentrate mixture than when corn silage is fed.

Conclusions. These interviews with dairymen and cattle feeders lead to the following conclusions:

1. More and more farmers, particularly dairymen in the rough land, will feed grass silage during the coming years.

2. Dissatisfaction with grass silage comes mainly because the hay crop was not ensiled properly. The walls must be airtight in addition to being smooth and perpendicular.

3. Cattle feeders have found grass silage entirely satisfactory for roughing over their steers and heifers, provided some grain is fed along with the silage. However, there is no need of feeding a protein supplement with grass silage (alfalfa), because this form has much more protein than corn silage.

4. Grass silage is a boon to believers in soil-conserving farming. Erosion will be reduced to a minimum when farmers quit growing silage corn and plant more alfalfa-bromegrass mixtures. Ensiling the surplus hay is a good way of solving the problem of what to do with the extra hay that accompanies a soil-saving type of farming.

5. Grass silage is not a miraclemaker. It will not make cows produce more milk and it will not fatten steers by itself. But, used wisely and in combination with other feeds, it will go far toward helping dairymen to produce cheaper milk and feeders to obtain cheaper beef. **END**

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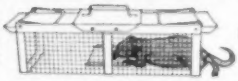

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When your cattle start to scratch

. . . it may be lice, mange, ringworm, X-Disease, mad itch, or nutrition. Here are symptoms, what to do

By Dr. J. W. Bailey
Veterinarian

The chances are good that your cattle will have some kind of skin trouble this winter. Anyway, this is the time of year when such things are most likely to appear. There are probably two reasons why skin troubles are commoner in the winter than during other seasons.

First, the days are shorter and there isn't so much sunshine to act as a disinfectant for the animals. The brutes are inside a great deal of the time, anyway, so their exposure to light is decreased that much more.

Second, the hair of cattle is longer and thicker in winter and naturally catches and holds more manure, skin scales, and other forms of filth. The animals don't get cleaned off by rains as they do during the pasture season, so they generally get quite dirty before spring. This extra-heavy, extra-dirty overcoat is made to order as a hide-out for several causes of skin troubles.

Watch for these signs in midwinter. Most skin troubles start in a small way with cold weather and take several weeks really to get going. That's why you probably haven't seen any indications of trouble until about now.

Anyway, some cold day you'll suddenly notice that you have skin trouble in the cow barn. The outstanding symptom may be bald spots of various sizes which may be a healthy pink or scabbed over with gray or bloody crusts. They may appear anywhere, but are commonest around the tailhead and rump and over the face and neck. In addition, large areas of skin may be wrinkled and thickened like pieces of old, dried-out leather. Along with such symptoms, there also may be a heavy coating of oily "scurf" or dandruff.

The bad appearance may not be all, because intense itching goes with many skin troubles of cattle. As a result, animals may rub and scratch themselves frenziedly when turned loose and given a chance to do it. At other times, there will be no signs of itching at all, even though the skin plainly shows evidence of something being wrong.

Some real cases. There are several different kinds of skin trouble, so it's hard to say what your particular one will be. A few examples will show how similar symptoms go with different causes.

Last winter we saw some 2-year-old heifers which had what the owner thought was ringworm. Several remedies had done them no good, and the af-

fliction was spreading among them at an alarming rate.

Examination of a skin scraping under the microscope showed that the trouble was not ringworm at all. Instead, the specimen was fairly crawling with the mites that cause chorioptic mange.

Another time we were called to look at some lousy cows. No lice were found, but the microscope revealed plenty of mites. Not the chorioptic variety this time, either, but the kind that cause sarcoptic mange.

The exact type of mite involved is not important, but we cite these cases to emphasize the fact that there is more than one kind of mange and that it may be mistaken for something else. In addition, some other trouble may be mistaken for mange.

Found to be X-Disease. We well remember a New York farm where we called to examine some cows reported as having mange. The case was of interest because there was no evidence of a "catching" disease, and only a few animals were affected. This sort of thing just didn't add up to what might be expected of mange, so we started looking for something else. As things turned out, the skin trouble proved to be the comparatively new X-Disease, and the owner grew quite concerned.

"My neighbor's cows have got it, too!" he exclaimed in excitement. "They look just like mine!"

This sounded interesting, too, so we arranged to look at the neighbor's herd. However, this turned out to be a false alarm, because the trouble here was shown to be a bad outbreak of ringworm. No other cases of X-Disease were found in that particular locality.

May blame wrong thing. We have previously mentioned the man who thought his cows were lousy. Lice are perfectly capable of causing skin troubles, of course. The average stockman generally finds them without trouble, for they are big enough to be easily seen. In addition, a casual search will reveal "nits" or eggs on the hairs of infected cattle. However, even when lice are found, the pests may be blamed for troubles for which they are not entirely responsible.

We particularly remember an Eastern herd we saw a few years ago. In this case the animals were infested with two different kinds of lice. However, they were also loaded up with sarcoptic mites, and these latter parasites were the ones that had made a special kind of mess of the cows. The lice weren't numerous enough to do much damage at all.

Then there were some Wisconsin calves reported as being lousy. A few lice were present, all right, but we noticed a great many bald spots were covered with suspicious-looking, grayish scabs. Microscopic examination showed the typical threads of ringworm. So, you'd better look twice before you try to pin the blame on a single troublemaker in your herd.

Cow had mad itch. Some kind of skin parasite is generally believed to be the cause of intense wintertime itching of cattle. Well, either lice or mange mites will cause such a symptom, of course. However, itching can be caused by at least one other thing, too.

[*Turn to page 162*

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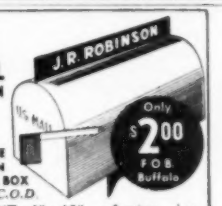

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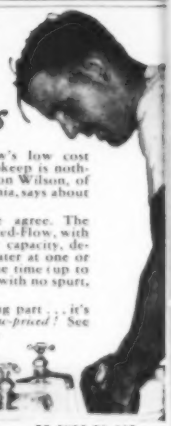

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STANDARD STEEL WORKS
Dept. SF-5 North Kansas City, Mo.

When your cattle start to scratch

[*From page 161*]

We remember a frenzied Guernsey that scared the daylights out of her owner by showing signs of intense itching. When we saw her, she had rubbed her hindquarters bare and bloody. Her head showed signs of excessive rubbing, too, and the owner reported she had even been chewing on her hind legs to relieve the itching. We were plenty careful with her, for she was suffering from the virus-caused disease known as "mad itch" or pseudorabies.

Still another cause. So far, we've considered skin troubles due to parasites, fungi, viruses, and whatever it is that's back of X-Disease. In addition, there is still another cause of such ailments.

Along this line we always think of some calves we saw a few winters ago. Their skins were patchily bald, thickened, and wrinkled over most of their bodies, even though the animals were only a few weeks old. A heavy scurf of dandruff went along with the other skin symptoms.

The whole bunch looked tough, even though they evidently were in excellent health. A close examination eliminated the possibilities of ringworm, mange, lousiness, and X-Disease.

Some kind of a nutritional deficiency was suspected when it was learned that the calves were being raised entirely on a milk substitute. More than that, the skin troubles cleared up in a couple of weeks when the animals were put back on a milk diet.

To this day we have no idea what, if anything, was lacking in the calf meal. It might even have been that the calves were allergic to something in the milk substitute. That sort of thing can happen to cattle as well as to people, you know.

However, it often happens that a skin condition cannot be remedied by a change in feed as was the case with the calves. That was what happened to some steers in an Iowa feedlot. The animals were healthy and in splendid physical condition, but their skins were in bad shape. Every one of the brutes was almost completely covered with a heavy coating of oily dandruff. We never did find out the cause, though several feed changes were made that winter in an attempt to correct it. Anyway, the steers brought top price on the market, so the skin trouble evidently wasn't too serious in the eyes of the packers.

What about treatment? Well, those are the skin troubles you're most likely to come across this winter. There are less common ones which do not merit space here at this time.

We haven't said much about treatment, because this is obviously dependent on the trouble involved. Once a definite diagnosis is made, you can decide what you want to use. Maybe you'll be partial to old favorites like flowers of sulfur for lice, iodine for ringworm, or lime-sulfur dip for mange. Or you may wish to try out one of the newer products such as chlordane or benzene hexachloride for such things as lice and mange. If you get tangled up with something like mad itch or X-Disease, you might as well forget about treatment, for there is none known at this time.

WONDERFUL RELIEF FROM HARSH LAXATIVE

"Two years ago I saw your ad about ALL-BRAN and took your advice. Haven't taken a pill or medicine since I began eating ALL-BRAN regularly!" Mr. Frank J. Baumbusch, 581 Lathrop St., Columbus, O. *Just one of many unsolicited letters from ALL-BRAN users.* If you are troubled with constipation due to lack of dietary bulk do as this man does. Eat an ounce of tasty Kellogg's ALL-BRAN for breakfast daily, drink plenty of water! If not *completely* satisfied after 10 days, return empty carton to Kellogg's, Battle Creek, Mich. Get DOUBLE YOUR MONEY BACK!

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Prices from $99.50 up

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Serving farmers for 44 years.

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MEN OVER 50 MAKE A FORTUNE

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Good salesmen in our organization have made fortunes. Our best men earn $10,000 in a year and more . . . and many of them are over 50. Here is a field where mature, experienced, ambitious salesmen can really prosper. It's a chance of a lifetime to make the kind of earnings you've always wanted . . . and make them easily and continuously.

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The right men can enjoy long-range security with us. We pay earnings in advance and require no investment. If you are over 50 write me a letter and get full information. Vice President, Dept. SF, Box 676, Dayton 1, Ohio.

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Each of Dobeckmun's 3-WAY CHOICE in glass substitutes leads in its field:

WIRE MESH for durability—strong, 10-mesh construction. Galvanized wire for weather and rust resistance. Rodent-proof. Extra heavy plastic coating. 69% light and 64.5% ultraviolet transmission. Guaranteed for three years.

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For any use, Dobeckmun glass substitutes are tops for economy and satisfaction. See the 3-WAY CHOICE at your dealer's or write us for samples.

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America's first manufacturer of laminated plastic glazing.

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AMERICAN CHAIN DIVISION
AMERICAN CHAIN & CABLE
In Business for Your Safety

People can catch 'em. Aside from helping to decide treatment, there's another reason why you'll want an early diagnosis of skin troubles in cattle. That is because some of the diseases will also attack human beings. For example, you can get either ringworm or sarcoptic mange from your affected animals. Thus a correct diagnosis may keep you from taking chances with human skin troubles.

Do two things. As we see it, the appearance of winter skin troubles in cattle should be the signal for you to act immediately, if not sooner:

1. Find out the exact trouble. Get a veterinarian to help with the job, if necessary.
2. Get started with treatment if one is available.

Better not do like Grandpa did and wait for spring to come along and cure the condition. It's a long time before grass grows again, you know, and your trouble may be one that sunshine and pasture won't fix up, after all. Anyway, a program of patient waiting may cost you plenty through smaller milk checks, thinner animals, and lowered resistance to other forms of disease. END

News

Hard seeds may save your legume stand

Probably 9 farmers out of 10 would be reluctant to buy legume seed carrying as much as 30 percent hard seeds. But M. T. Munn, of the New York State Agricultural Experiment Station at Geneva, reports that in some instances seedings would be failures were it not for the hard seeds present.

Munn investigated one case in New York where a field had been two-thirds planted with scarified alfalfa seed and finished with seed carrying 30 percent hard seeds. It was simply a case of the farmer running out of seed and buying what he could to finish the job.

This particular farmer was mighty glad he got the hard seeds, for hot, dry weather burned out the seeding; then a belated rain germinated the hard seeds to give him a stand on at least part of the field. Hard seed is live seed—it only takes somewhat longer to germinate.

The New York Experiment Station has been running experiments on hard seeds over a period of 25 years. While hard seeds may be very beneficial to the grower, they also can be too hard to be of much practical use. For instance, the New York Experiment Station workers soaked hard alsike and red clover seeds for as long as 25 years without getting them to germinate. Only by nicking the seed coat, to allow moisture to penetrate, did the seeds germinate.

But where a legume stand is to be allowed to remain for several years, hard seeds may have a distinct advantage in that delayed germination of the seed will tend to improve a poor or thinning stand. A case in point is that seed of Ladino clover and native birdsfoot trefoil carry a high percentage of hard seeds, and both these are long-lived plants.—*Don L. Helt.*

40 TO 70% *More Water*

WITH THE NEW
F&W VARIJET *bullet pump*

Extra water for emergencies or future needs. It's yours *without extra cost* with the new F&W VARIJET Bullet Pump. With F&W's patented VARIJET it delivers 40 to 70% more water. And, with F&W's precision-machining and dynamic-balancing, it gives extra quiet, extra dependability. You can bank on F&W dependability! Every pump is tested for pressure and capacity. There's an F&W Water System for every type well — every farm need. Full information is yours without obligation. Send for —

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Send me your newest edition of "Running Water for Rural Homes" with details on the New F&W VARIJET Bullet Pump.

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MAN WITH CAR

No Time Like Now to Get in *McNess Business*

It's no trick to make good money when you use your car as a McNess "Store on Wheels." Farmers buy everything they can from McNess Men because McNess Products are tops in quality, represent extra values. Attractive business-getting prices and premiums, also money-saving deals to customers make selling McNess daily necessities a snap.

Use Your CAR to Raise Your PAY

We Supply Capital—Start Now!
There's no better work anywhere. Pays well, permanent, need no experience to start, and we supply capital to help you get started quick. You begin making money first day. Write at once for McNess Dealer Book. It's FREE. Tells all — no obligation. (1)

THE McNESS CO., 194 Adams St., Freeport, Ill.

WATCH HER

Her production will start dropping too fast this month if you don't watch her.

All our cows without exception give more milk when Stock Tonic, a Dr. Hess product, is added to the ration. They give as much as ¼ lb. more milk per lb. of grain consumed. Stock Tonic adds tonics for better appetite and essential minerals.

Watch costs. Make feed go farther. We feel sure Stock Tonic can help you do it. Get Stock Tonic from your Dr. Hess dealer—or buy feed containing Stock Tonic. Dr. Hess & Clark, Inc., Ashland, Ohio.

STOCK TONIC

A DR. HESS PRODUCT FOR COWS LAZY INSIDE

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 30. Visit store nearest you for help with decorating problems.

Now you can select rotor speed for best tilth (medium, fine, coarse) for each soil and crop. Reason: gear-shift transmission controls rotor speed . . . SEAMAN means adjusted tillage, — secret of high yields. Rocks no problem. Complete tillage generally in one trip. Mixes-in fertilizer uniformly. GET SEAMAN for spring tillage.

Complete story of Seaman Tillage in new FREE BOOK "Benefits of Rotary Tillage." Send for it—now

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CORONA
ANTISEPTIC OINTMENT

Great for massage. Odorless antiseptic. Extra-rich soothing base. Helps fight infection, hasten healing. Many home uses.

Write for free sample today.

Half-pound Can 75¢ At your Dealer

The Corona Mfg. Co., Box 181, Kenton, Ohio

Veterinary

Oats for cows

Is one of your good cows "off-feed" and sort of "picky" about what she eats? Well then, you might try her out on some whole oats. When simple digestive upsets are involved, this grain is hard to beat as an appetizer for cattle. Maybe a quart or so of it a day will put your animal back on the right track again in short order.

Try oats sometime when you're sure the ailing cow doesn't have something like acetonemia or hardware trouble.

Feeding for better lamb crop

Bred ewes will give you a better lamb crop next spring if they are well fed this winter. Fewer of them will be lost with pregnancy disease, too.

The animals should be fed so they gain flesh all through the gestation period. When given all the good legume hay they will eat twice daily, no grain will be needed by the ewes before the last month or six weeks of their pregnancy.

When poor roughage must be fed, concentrates are best provided all winter. A good grain mixture consists of molasses mixed with equal parts of oats, corn, and bran. It is fed at the rate of not over a half pound daily per ewe. The grains are fattening, the bran serves as a nutritious laxative, and the molasses serves the same ends and also helps to prevent pregnancy disease.

You'll have to use a little judgment on this feeding business, of course, because it is undesirable to have the ewes really fat at lambing time.

Removing extra teats

The other day we saw a farmer removing extra teats from his heifers, and doing it without any cutting or bloodshed. His "instruments" consisted of a fountain pen top, an empty .410-gauge shotgun shell, and a few ordinary rubber bands.

The size of the teat to be removed determined whether the pen top or shell was used. The pen top or shell then had a rubber band wound around it fairly tightly.

The shell or pen top was next slipped over the extra teat, and the rubber band was worked off so it fitted snugly around the base of the teat. Then, the shell or

"There are 982 lumps of coal in a ton!"

pen top was removed, leaving the rubber band in place after the fashion of the "elastrator" used to dock and castrate lambs.

A little swelling and soreness develop for a few days after application of the band. In a week or so, however, both the teat and rubber drop off, leaving a completely healed wound.

Most farmers feel that four "handholds" are enough on a cow's udder, so maybe you'll want to try this method of removing extra ones while the animals are still under a year old. Better do it now instead of waiting until they start giving milk.

Beating winter calf troubles

You'll have better luck with calves this winter if you don't crowd them or let them all run together in the barn. Overcrowding means overheating, followed by chilling. It also means lack of exercise and extremely filthy quarters.

Such things can easily start pneumonia and outbreaks of other common calf diseases. When calves of all ages run together, troubles that are easily started may grow highly contagious and turn out to be mighty hard to stop.

A combination of these two poor practices, then, can be expected to cause plenty of calf-raising troubles.

In order to avoid overcrowding, you may have to look outside of the barn for additional room. If so, maybe you can fix up a few calf pens in the machine shed or in one of your other buildings. Whatever you do, try to bunch the calves according to age. The various-sized animals are best kept completely apart in small groups of four or five to a good-size pen.

Retained afterbirth

Been wondering why some of your cows didn't "clean" after calving? Well, the actual cause of this trouble is some kind of infection in the uterus.

This can be Bang's disease, vibrionic abortion, trichomoniasis, yeast, molds, bacteria, or something we can't even identify. Sometimes we can figure out what it is and how it got started and sometimes we can't. Anyway, the infection causes inflammation and swelling of the "buttons" in the uterus. Then the afterbirth doesn't loosen and come away from them in a normal manner after calving.

You probably won't be able to check your cows for all possible types of uterine infection. However, you can still do something that will cut down the number of retained-afterbirth cases on your farm: Just make a practice of not breeding any cows back for at least 60 to 90 days after calving. Such a rest gives the uterus a chance to clean up after calving and to get rid of any existing infection before the cow becomes pregnant again. Otherwise, the germs or what not of the trouble may be sealed in the uterus to grow with the calf and cause a retained afterbirth at the next calving.

Hog rations and enteritis

The other day we were called to look at a bunch of feeder pigs which had the owner scratching his head. Most of the animals were "scouring" rather badly, though none of them seemed actually sick. They looked fairly rough in general and were reported as steadily losing weight even though they were "eating their heads off."

Inquiries revealed that an all-corn diet

[*Turn to page 166*

"The best treatment for mastitis* I've ever used!"

says
E. J. Lubeck
of
Milton Junction,
Wisc.

"I keep it right in the barn . . ."

". . . where I can get it quickly . . ."

". . . and use it to treat mastitis in a few seconds"

"We spent a lot of money trying to keep mastitis out of our herd of 27 Holsteins. We tried most of the mastitis treatments and nothing seemed to work.

"Then I read about Squibb's Penicillin Ointment. I went to my druggist, bought my first tube and used it. *I have not been without it since.*

"This Penicillin Ointment is the best treatment I've ever used. It has given us remarkable results and saved us real money. Now we expect to continue getting full production of milk and cream from clean, healthy cows.

"We especially like the shape and style of the tube. It is fine. Cows do not seem to object and the thin taper makes it mighty easy to insert in the quarter. The ointment comes out easily, too, so it only takes a few seconds to treat a quarter.

"Whenever there is the least sign of mastitis in our herd, we treat the cow then and there, as we keep Penicillin tubes in the barn all the time."

• • •

It's a good idea to do what Mr. Lubeck does: keep some Squibb Instant-use Penicillin *on hand* right in the barn, and treat mastitis early—as soon as it shows up.

Why not get a dozen tubes the next time you're in your drug store? They have it or can get it for you.

For accurate diagnosis of mastitis, consult your veterinarian.

For SCOURS in calves and other young animals—PENOVOXIL CAPSULES. A specially prepared, exclusive Squibb formula—only product of its kind on market. Effective—easy to use—no drenches—no injections. If your druggist isn't supplied, write to E. R. Squibb & Sons, Veterinary and Animal Feeding Products Division, Dept. SF-2, 745 Fifth Avenue, New York. Literature on Penovoxil Capsules, Penicillin Ointment, and other Squibb specialties, available on request. Just drop us a postcard for yours.

*Due to *Streptococcus agalactiae*, the cause of the largest percentage of all mastitis cases.

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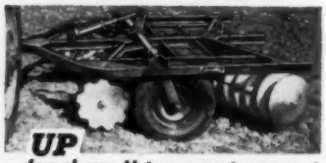
It's The Smalley
HYDRAULIC
RAM DISK



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for sharp U-turns or transport

DOWN
for deep-cut disking

It lifts, it lowers, it cuts deep, it's controlled by a hydraulic ram. Rugged and powerful as a bighorn ram, this new disk is the dream of the tractor farmer. Extra heavy notched disks cut stalks, orchard or pasture sod.

Permanent angle, tandem disks in a heavy-girder frame pulverize completely at any depth you select, from 1 inch to hub-deep. Enclosed air-tired wheels permit disking close to fence and trees.

Touch the quick power lift to adjust depth, turn, cross waterways or travel on the road. It's more than just another disk — it's the RAM DISK.

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64 YEAR AGO
MY FRIEND
WEAVE HIS FIRST WOOL

● Three generations ago old Joseph Mandelert set up his looms on the banks of Chippewa River and wove the first soft, colorful Chippewa Woolens. Today his grandson, and hundreds of other fine craftsmen are weaving brilliant, he-man plaids for famous Chippewa outerwear.

Here's Chippewa's Zipper Jac
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CHIPPEWA WOOLENS
Chippewa Falls, Wis.
The Styles Outdoor America Loves

Veterinary

[*From page 165*]

was being fed, and this was finally blamed for most of the trouble. A course of medicine and a change of rations soon had the porkers fattening in proper style. Still, the expense of treatment and wasted feed might have been spared if a proper ration had been provided at the start.

"Three-day calf scours"

In past years have you sometimes had bad luck with calves that came during the late winter? Did nearly all of them suddenly sicken and die within a short time after being born apparently strong and healthy? Did the losses continue in spite of everything you did, and then stop abruptly with the arrival of spring? If so, you were probably dealing with what is commonly called "three-day scours."

Field studies indicate that the trouble probably starts before the calf is born and is due to a deficiency of Vitamin A. Cows on pasture are able to take plenty of Vitamin A from green feeds, and some of it is passed on to their unborn calves. In addition, they are able to lay up a reserve supply of the vitamin in their bodies for future use.

But during the cold season there is little green feed and, by late winter, body reserves may be so low as to seriously affect calves the cows are carrying.

You can prevent three-day scours by feeding Vitamin A to the expectant mothers. Supplying it to the calves after birth is apt to be too late. Try giving each cow a million units of Vitamin A every week during the last month or so of pregnancy. You can get it from your veterinarian at a reasonable price, and the investment may save your winter calf crop.

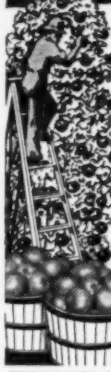
Winter treatment of mange

For a long time now we've been a little afraid of using liquids on swine during the winter to control mange. Seemed as if there was always quite a bit of danger from chilling the animals.

However, we recently saw an owner using such a liquid with both safety and good results. He made use of a chlordane preparation in an ordinary hand fly-sprayer. The solution was sprayed high above the pens so the porkers weren't actually wetted. The small amount of mist that finally settled on the hogs was enough to kill and repel mange mites for quite a length of time.

In recommended dilution, chlordane is also reported as effective against lice. If properly mixed and handled, it is nonpoisonous for farm animals. END

MIRACLE TOMATO
Yields 2 BUSHELS To a Vine



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"In 10 short years my bonds will pay off $4 for every $3. And that's a mighty fine return on a crop that isn't affected by weather, floods, or bad times.

"We're also putting aside Savings Bonds for the children's college education and all those ranch and home improvements we've always planned.

"A lot of dreaming you might say? But we're making sure *now* that those dreams come true. With our money in safe, sure U. S. Savings Bonds, our future will be bright."

Plant now in U. S. SAVINGS BONDS

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Dairy

Old milk cans may be costly

When the rejection of one can of cream can cost you the price of two new cans, why fool with an old, battered, rusty container which has long outlived its usefulness? That question is asked by the Milk Can Institute. Figures show that the dairy farmer need invest only about $1 a year to protect milk or cream worth hundreds of dollars.

Another sign fails

You can't pick a good milker by looking at the veins and milk wells on her belly—that time-honored yardstick has hit the scrap heap. After comparing the milk production records of 195 cows, the U.S.D.A. now states that the degree of veining on the udder and the size of veins and milk wells on a cow's abdomen have little or nothing to do with her ability to produce large quantities of milk.

When drinking cups pound

Ever hear the water cups pound, usually just after a cow stops drinking? The pounding comes from a surge of water through the pipe. The trouble can be ended by placing an air dome near the end of the line, according to specialists at Michigan State College. You can use a piece of 2" or 2½" pipe about 24" long mounted on a T. The air in this short length of pipe cushions the surge of water and stops the noise.

Why applications are rejected

When farmers send in applications for registration of calves sired by artificial means, about six things can be done wrong which will result in return of their blanks. These bobbles are listed below:

1. Failing to sign the breeding receipt which goes along with the application for registration. 2. Forgetting to send any receipt at all. 3. Using the code number instead of the registration name and number. 4. Getting semen from a stud which fails to notify the breed associations of semen shipments to another organization. 5. Technician's not filing a signature card with breed association. 6. Sending the wrong receipt when the cow has been inseminated more than once.

Cows you can afford, or can't

With slimmer pickings ahead, dairy farmers will have to cut more corners than ever. There'll be even less room for cows that can't pay their keep.

How much you can get for the time and money spent on a good milker, as compared with a "gold brick," is shown in figures taken from last year's records of the Iowa Dairy Herd Improvement Association. Cows which gave less than 175 pounds of butterfat threw their owners for a loss—they cost 25 cents an hour for the time spent in caring for them. On the other hand, cows averaging 337 pounds of fat yearly paid their owners $1.16 an hour—or a difference of $1.41.

The same idea was true when it came to how much they returned per dollar's worth of feed fed. The cows giving about 200 pounds of butterfat per year paid their owners only $1.74 for each dollar spent on feed, while the 337-pounders returned $2.40 per dollar's worth. END

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Improved Automatic **Jayhawk** Stacker Wagon Loader Sweep Rake
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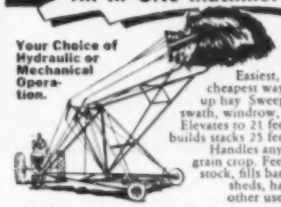

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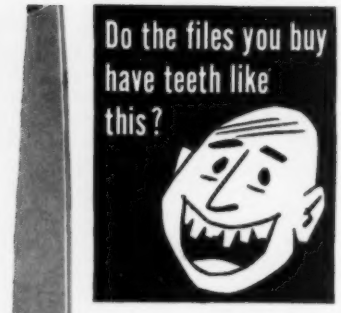

YOU couldn't know, of course, by looking at a file's teeth with the naked eye. But a magnifying glass will often show the teeth of a poorly cut file so varying that hundreds of them may be doing no work at all. Being too short, they fail to bite into the work. It's like getting only half a file for your money.

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Livestock

Cheap pig comfort

Two truckloads of beer keg corks, about to be thrown away, came in handy as hog house insulating material for Rudolph Smolek, La Crosse County, Wisconsin. He used a hammer mill to grind the corks to pea size, and then tamped the particles into the walls.

Now there's no need for special heating of the hog house during the long, cold winters. Furthermore, the building is cool during the summer months. A straw loft also helps out with the insulation job.—*H. S., Minnesota.*

Best chance for beef profit

SEEMS hard to believe, but some farmers fatten their cattle with only 60 percent as much feed cost as other stockmen. And they still get about the same margin and selling price. This was revealed by the University of Illinois through an analysis of records from 151 herds fed through the 1946-47 season.

Here are the figures for 79 herds of good to choice yearlings: For the low-cost herds, it took only $22.55 worth of feed per 100 pounds of gain, but the feed cost ran $38.94 in the high-cost herds. The same general picture—only 60 percent as much feed cost—was true when comparing farms which handle calves or heavy cattle.

One big reason for this wide difference in cost is the nature of the feed itself. The low-cost herds ate only half as much corn and two-thirds as much protein supplement as the high-cost herds. These feed savings, in part at least, came through substituting extra hay and pasture. The low-cost herds were on pasture about one-third more of the time.

Where exercise pays, or doesn't

KEEPING fattening hogs in close confinement enables them to gain a little faster and at a slightly lower feed cost per 100 pounds of gain, compared with hogs getting exercise. This was shown by four years of tests at the Indiana Agricultural Experiment Station. Although the confined hogs had a slight advantage in dressing percentage, their carcasses were less firm and back fat was slightly thicker.

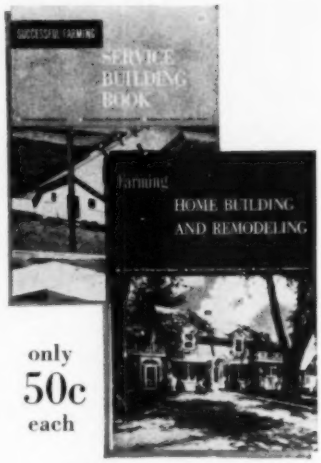
Average daily gain for confined hogs was 1.79 pounds, compared with 1.66 pounds for those permitted to exercise. Total feed eaten per 100 pounds of gain was 374.9 pounds for confined hogs and 386.3 for those getting exercise. Average thickness of back was 2.01 inches for confined hogs and 1.90 inches for the others.

Cobs cut beef cost

IF YOU'RE shaky about future cattle-feeding profits but have plenty of corn to shell and medium-quality hay in the mow, take note of a recent test at the Ohio Experiment Station. It showed that corn-and-cob meal with a double shot of cobs made cheaper beef than a ration of ground shelled corn.

The 600- to 700-pound steers in this experiment were fed 200 days on corn-and-cob meal, to which was added an extra part of ground cobs. They also received 2 pounds daily per head of soybean meal, plus medium-quality mixed hay, fed free-choice.

When slaughtered at weights ranging from 1,025 to 1,040 pounds, the steers fed



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cob meal dressed 60 percent. Cost of gain was $3.15 less than for steers which received ground shelled corn. The steers on shelled corn dressed slightly higher, but carcass grade was not markedly superior.

Shelled corn was charged at $1.40 per 56 pounds (a bushel), but no charge was made for cobs.

Stopped rooting under feeders

THANKS to good, tight platforms, self-feeders and waterers are no longer damaged by rooting hogs on the Oscar Skogan farm in Dodge County, Minnesota. The Skogans have found that the pigs no longer can upset the feeders by rooting on the shady side. This saves feed.

Furthermore, the platforms keep the feeders off the ground so they will not rot or rust. Before the platforms were built, the hogs were constantly undermining the ground, upsetting feeders, and getting them out of shape.—*H. S., Minnesota.*

Fed enough protein, earned more

ONE GROUP of Illinois hog raisers made an average of $2,400 more profit over a 10-year period than another equal-sized group—all because they fed enough protein and mineral while the other group skimped.

A recent study of 200 hog farms made by the University of Illinois showed that the 60 farms where the most protein and mineral were fed had $8 higher returns per $100 of all feed fed than the 60 farms where the least protein and mineral were provided.

On the 60 farms with the highest returns, an average of 11 pounds of protein and mineral concentrates, mostly protein, were fed per 100 pounds of grain.

Makes beef on grass

"I won't do much plowing as long as I can get more than 325 pounds of beef per head on grass alone," says Ralph Jenkins, Wyaconda, Missouri.

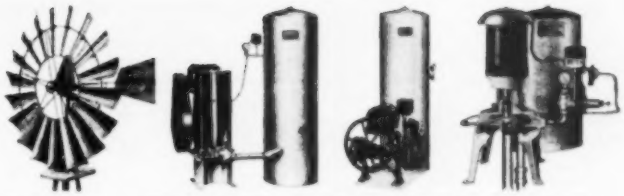
Jenkins got a gain of 326 pounds per steer in 120 days last summer. The average daily gain was 2.71 pounds per head. The cattle grazed a mixture of red and alsike clover, lespedeza, timothy, and bluegrass. The pasture had been disced, limed, and phosphated two years before, when the legume seeding was made.

The steers, dropped in the spring of 1948, were purebred Herefords. They were wintered on legume hay without any grain, carried on pasture, and then weighed out and sold on August 23. Sale weight was 1,054 pounds per head, and grade was "low good."

Jenkins points out that steers must have some age if they are to make the best use of pasture. Another lot of late fall calves was carried on the same pasture, after being wintered on legume hay and a mixture of corn-and-cob meal and oats. These calves also got the same grain mixture during the pasture season, self-fed. The younger steers gained only 1.95 pounds per head daily.

Nearly all of the 400 acres of grassland on the Jenkins farm has been limed and fertilized. Usually a pasture is plowed, treated, and seeded to small grain. Soil treatment goes on the land at the time the grain is seeded. Grasses and legumes are seeded with the grain or put on in the early spring.

Mr. Jenkins believes that soil treatment on pastureland is even more profitable than when fertilizer is applied on cropland.—*L. R., Missouri.*



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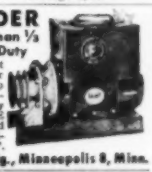

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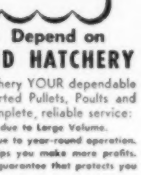

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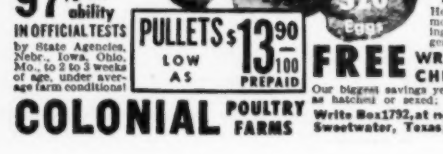

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Minorca Leghorns			
Hamp Leghorns	$12.90	$3.90	$25.80
White Leghorns			
N. H. Reds, Barred, White, Buff Rocks, Wh. Wyandottes, S. C. Reds	$12.90	$11.90	$14.90
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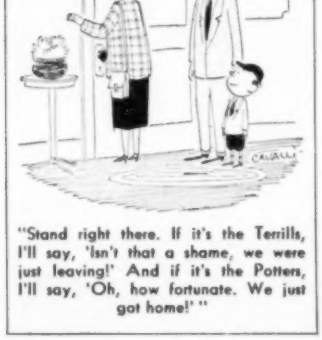

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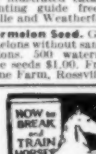

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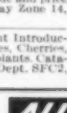

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All around the farm®

A page written by our readers

I replace the lead in an automatic pencil with an old phonograph needle, making a useful scriber for marking metal. It can also be used to score cardboard which I want to bend. When not in use, the point can be retracted to protect it and anyone handling it.—*Mrs. M. F., Ohio.*

The top of a large milk can forms the funnel for my bag filler, as shown in illustration. Three hooks 2" long are riveted to the neck of the can top. A 1" pipe, 36" long, is bolted to the funnel as close as possible to lower lip, leaving only room enough to slip a bag through. On a cleated wood base I set a pipe flange and turn into this flange the lower pipe, which is 1¼" in

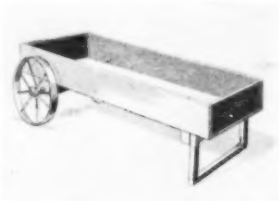
diameter and about 24" long. A bent bolt, threaded through the coupling, holds bag at desired height. This bag holder is sturdy, adjustable, and simple to make. Also, there is just about no wear-out to it.—*E. P., Michigan.*

We have found it hard to stretch 5' chicken netting tight enough to keep it from sagging between the posts. Therefore, we stretch smooth wire very tightly an inch or two above the netting and, with a hog ringer and rings, attach the netting to the smooth wire. It will keep the netting from sagging. The bottom can be fixed the same way to keep dogs and chickens from going under the netting.—*E. H., Missouri.*

I needed to have a vise entirely portable, but as solid as an anvil, if that were possible. Out of scrap metal, I made a stand for a leg vise, as shown, and can use it any place where there is a solid floor on which the stand and leg may be placed.—*R. R., Indiana.*

When I mix concrete for various uses around the farm and have part of a sack of cement left over, I put it in an old carbide can. This type of container can be closed airtight. The cement will keep indefinitely and can be used at a later date without spoilage or waste. —*E. F. C., Kansas.*

We have built all our bunks, for feeding cattle, with regular 4"x4" legs under one end and a pair of old wheels and axle, with an old railroad tie as cross member, under the other end. When we wish to move the bunks from mudholes or from lot to lot, we can quickly hitch on the tractor or truck and move them easily. It is easy to build the 4"x4" legs so that they pivot on bolts secured to the box (see illustration), and the cross brace at bottom of the legs can be used for a tractor hitch.—*G. H., Iowa.*

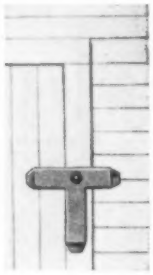


By waxing the feed hopper of my gravity-feed hammer mill with ordinary automobile body wax, I have provided a very smooth, slippery surface. The wax has made it much easier to put the feed into the mill.—*R. A. H., Pennsylvania.*

I keep a one-gallon crock containing used crankcase oil handy to the shop workbench. A cover to keep out dust keeps the oil clean, and the oil is handy for dipping bolts, rivets, all kinds of small parts, when doing repair jobs on farm machinery.—*L. F. D., Missouri.*

To keep the nozzle of my hand grease gun free from dirt and debris, I slip a fired 12-gauge shotgun shell over the nozzle. It fits snugly on my grease gun and this nozzle cap is easy to remove and replace.—*J. D. C., Illinois.*

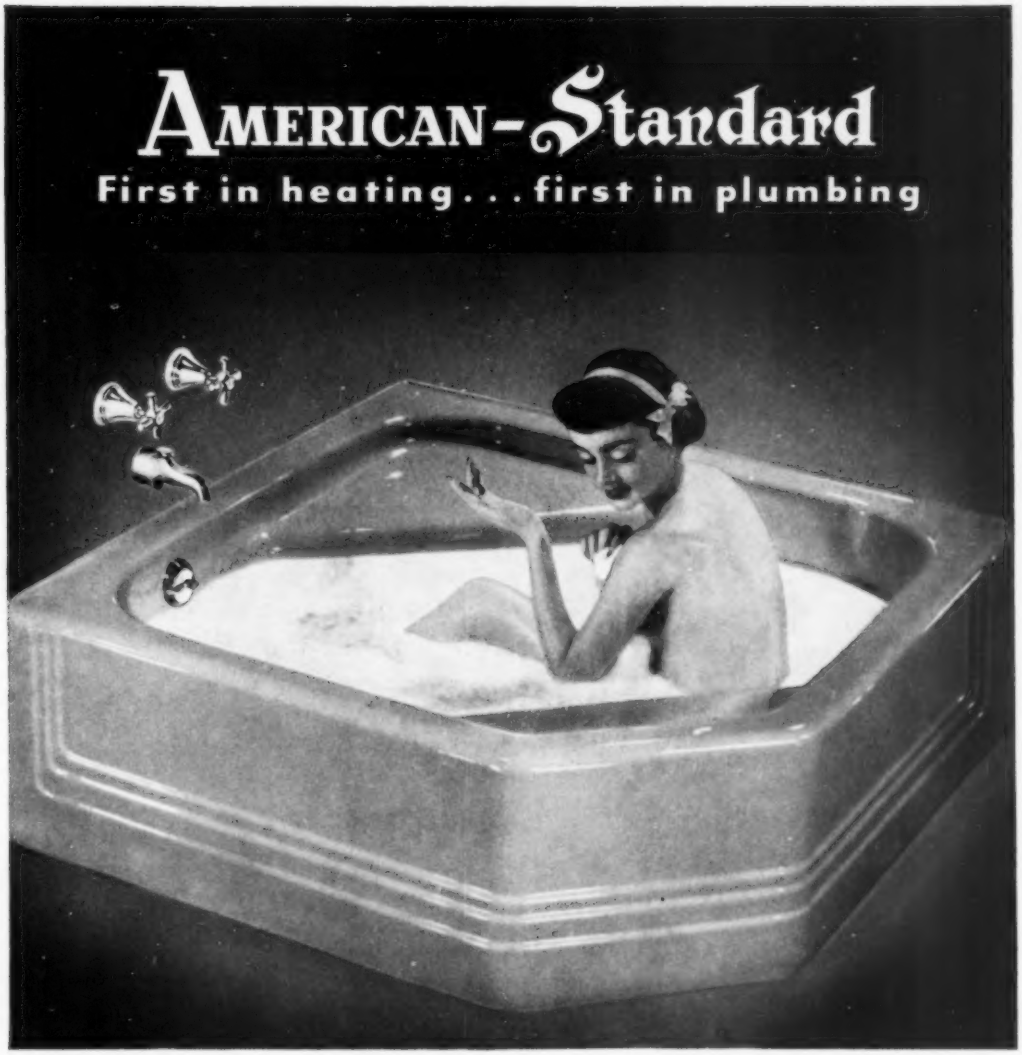
Instead of the ordinary turn button used to hold doors shut, I have been making mine in the shape of a big capital T, as illustrated. The stem holds the top of the T horizontal, and the only way the button can be turned to release the door is squarely at a right angle to the locked position where it normally hangs of its own weight.—*C. S.*



When replacing the panes in our haymow window high up in the gable end, I tack new window screen on the inside of the sash before returning it to its place. This is to keep pigeons and starlings from breaking the glass again by flying against it.—*R. H., Iowa.*

Whenever I have several boards to saw the same length, I measure and cut one and then nail a cleat on one end. It is then easy to measure each board without running to the other end each time to see that the ends are exactly in line.—*A. C., Ohio.*

Successful Farming **will pay $5 for each item upon publication. You are invited to send us your ideas. We consider each one carefully, but regret we cannot return those not published.—*The Editors***



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Betty Crocker tells... How your yeast rolls can always be as good as these!

CINNAMON TWISTS

✓ SECONDS TO KNEAD ✓ ONLY ONE RISING
✓ SERVE PLAIN OR FROSTED

Want Fluff-Light, Tender Rolls Like These? Here's Real Help!
by Betty Crocker

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Use only GOLD MEDAL... the flour you can depend on

Bring to boiling in large saucepan
- ***1 cup sour cream**

Remove from heat.

Stir in until well blended . . .
- **2 tbsp. shortening**
- **3 tbsp. sugar**
- **1/8 tsp. soda**
- **1 tsp. salt**

Cool to lukewarm.

Add . . . . . .
- **1 large unbeaten egg**
- **1 cake crumbled compressed yeast (†or 1 pkg. dry granular yeast)**

Stir until yeast is dissolved.

Mix in with spoon
- **3 cups *sifted* GOLD MEDAL "*Kitchen-tested*" Enriched Flour**

Turn out onto lightly floured board. Knead lightly a few seconds to form a smooth ball. Cover with damp cloth and let stand 5 minutes to tighten up. Roll dough ¼-in. thick into rectangle 6x24-in. Spread entire surface with *2 tbsp. soft butter or margarine.*

Sprinkle half of dough (the long way) with mixture of . . .
- **⅓ cup brown sugar (packed in cup)**
- **1 tsp. cinnamon**

Bring unsugared half of dough over sugared half, pressing top surface lightly to seal in filling. (This makes rectangle 3x24-in.) With sharp knife, cut dough into 24 strips 1-in. wide. Taking each strip of dough at both ends, twist in opposite directions, forming a spiral stick. Place on greased baking sheets about 2-in. apart, pressing both ends of sticks firmly and flatly to the baking sheet. Cover with a damp cloth and let rise at 85° until very light . . . about 1 hour and 15 minutes. Bake *12 to 15 minutes* in *quick moderate oven* (375°). If desired, spread tops of baked sticks, while still warm, with Thick White Icing (¾ *cup confectioners' sugar* and *about 1 tbsp. milk*). *Makes 2 dozen sticks.*

• • •

*To sour sweet cream, add 1 tbsp. vinegar or strained lemon juice to 1 cup sweet cream. Let stand 5 minutes before using.

†If dry granular yeast is used, follow the package directions. Or, add to ¼ cup lukewarm water and let stand 5 minutes *without stirring*. Stir thoroughly before adding to liquid mixture in recipe. Subtract the ¼ cup water from total liquid in recipe.

IMPORTANT: Do not use self-rising flour (sold in parts of the South) with this recipe.

More Sacks of GOLD MEDAL "*Kitchen-tested*" Flour are Bought than the Next 5 Brands Combined